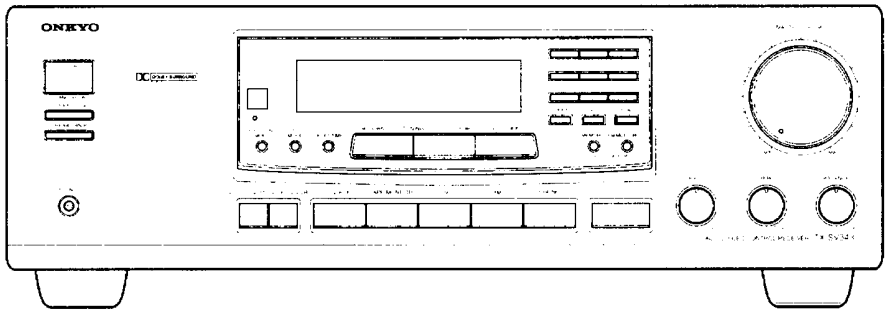
ONKYO

TX-SV343

Audio Video Control Receiver

Instruction Manual



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Thank you for purchasing the Onkyo TX-SV343 Audio Video Control Receiver.
Please read this manual thoroughly before making connections and operating the unit.
Following the instructions in this manual will enable you to obtain optimum performance and listening enjoyment from your new A/V Receiver.
Please retain this manual for future reference.

Features

Power output:

USA & Canadian models:

Stereo mode

60 watts per channel, min. RMS into 8 ohms, both channels driven from 20 Hz to 20 kHz with no more than 0.08% THD.

Surround mode

Front L/R Channels

2 × 50 W (1 kHz, 0.08%, 8 ohms)

Center Channel

50 W (1 kHz, 0.15%, 8 ohms)

Rear Channels (Rear channel only driven)

15 W + 15 W (1 kHz, 0.3%, 8 ohms)

European models:

Stereo mode

2 × 60 watts at 6 ohms (DIN)

Surround mode

Front L/R and Center Channels

3 × 50 watts at 6 ohms (DIN)

Rear Channels (Rear channel only driven)

15 watts + 15 watts at 6 ohms (DIN)

Asian models:

Stereo mode

2 × 80 watts at 6 ohms, 1 kHz (EIAJ)

Surround mode

Front L/R and Center Channels

3 × 65 watts at 6 ohms, 1 kHz (EIAJ)

Rear Channels (Rear channel only driven)

20 watts + 20 watts at 6 ohms, 1 kHz (EIAJ)

- **Dolby Pro Logic and Hall Surround mode for spacious sound**
- **All channels boast discrete output stage circuits (extremely rare in this receiver class) for accurate high-current, low-impedance drive**
- **Costly, high-quality parts such as large power transistors, oversized transformer and a heavy-duty, one-piece, extruded heat sink enhance low-impedance drive capability**
- **Dedicated line-level subwoofer output**
- **4 Audio and 2 AV inputs accommodate a complete AV system**
- **A/B Speaker selector and outputs**
- **Tape monitor**
- **Adjustable digital delay**
- **30 FM/AM random presets**
- **Preset scan tuning**
- **3 Station group presets (10 stations per group)**
- **RDS with PS (European models only)**
- **Direct access tuning**
- **Motor-driven, precision 4-gang volume control**
- **Headphone jack**
- **Audio mute, sleep timer (via remote)**
- **Battery-free memory backup**
- **RI Compatible remote control**

Manufactured under license from Dolby Laboratories Licensing Corporation.

DOLBY, the double-D symbol ⧫⧫ and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

FOR U.S.A. MODEL

Note to CATV system installer:

- This reminder is provided to call the CATV system installer's attention to Section 820-40 of the NEC which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

FOR CANADIAN MODEL
POUR LE MODELE CANADIEN

- For models having a power cord with a polarized plug.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

- Sur les modèles dont la fiche est polarisée.

ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

FOR EUROPEAN MODEL

Declaration of Conformity

We, ONKYO EUROPE
ELECTRONICS GMBH
INDUSTRIESTRASSE 18/20
82110 GERMERING,
GERMANY

CE

declare in own responsibility, that the ONKYO product described in this instruction manual is in compliance with the corresponding technical standards such as EN55013,EN55020,EN60555-2, EN60065

GERMERING,GERMANY

H. YAMAZOE

ONKYO EUROPE ELECTRONICS GMBH

ATTENTION FOR BRITISH MODEL

Replacement and mounting of an AC plug on the power supply cord of this unit should be performed only by qualified service personnel.
IMPORTANT:
The wires in the mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.
The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

IMPORTANT

A 5 amp fuse is fitted in this plug. Shoud the fuse need to be replaced please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS 1362. Check for the ASTA mark or the BSI mark on the body of the fuse.
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.
If in any doubt please consult a qualified electrician.

"WARNING"

"TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE."

CAUTION:

"TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL."

WARNING
RISK OF ELECTRIC SHOCK
DO NOT OPEN

- The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
- The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Important safeguards

1. **Read Instructions** – All the safety and operating instructions should be read before the appliance is operated.
2. **Retain Instructions** – The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** – All warnings on the appliance and in the operating instructions should be adhered to.
4. **Follow Instructions** – All operating and use instructions should be followed.
5. **Water and Moisture** – The appliance should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
6. **Carts and Stands** – The appliance should be used only with a cart or stand that is recommended by the manufacturer.

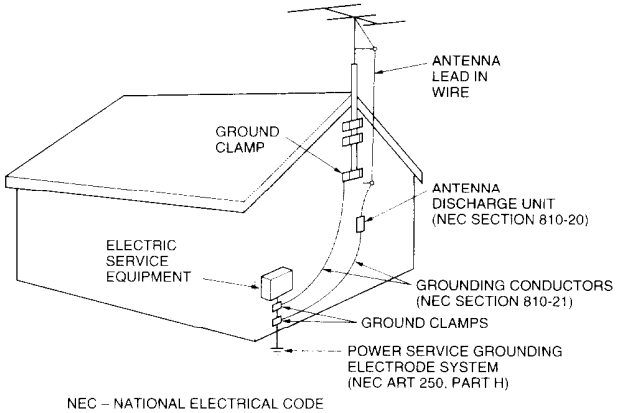
6A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

PORTABLE CART WARNING

S3125A

7. **Wall or Ceiling Mounting** – The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. **Ventilation** – The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or if placed in a built-in installation, such as a book case or cabinet that may impede the flow of air through the ventilation openings, there should be free space of at least 20 cm and open up behind the appliance.
9. **Heat** – The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
10. **Power Sources** – The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. **Polarization** – If the appliance is provided with a polarized plug having one blade wider than the other, please read the following information: The polarization of the plug is a safety feature. The polarized plug will only fit the outlet one way. If the plug does not fit fully into the outlet, try reversing it. If there is still trouble inserting it, the user should seek the services of a qualified electrician. Under no circumstances should the user attempt to defeat the polarization of the plug.
12. **Power-Cord Protection** – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, especially near plugs, convenience receptacles, and the point where they exit from the appliance.
13. **Cleaning** – The appliance should be cleaned only as recommended by the manufacturer.
14. **Power Lines** – An outdoor antenna should be located away from power lines.
15. **Nonuse Periods** – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
16. **Object and Liquid Entry** – Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
17. **Damage Requiring Service** – The appliance should be serviced by qualified service personnel when:
    A. The power-supply cord or the plug has been damaged; or
    B. Objects have fallen, or liquid has been spilled into the appliance; or
    C. The appliance has been exposed to rain; or
    D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
    E. The appliance has been dropped, or the enclosure damaged.
18. **Servicing** – The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.
19. **Outdoor Antenna Grounding** – If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of the antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure 73.1.

FIGURE 73.1:
EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE


ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810-21)
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)

NEC – NATIONAL ELECTRICAL CODE

S2898A

Precautions

1. Warranty Claim

You can find the serial number on the rear panel. In case of warranty claim, please report this number.

2. Recording Copyright

Recording of copyrighted material for other than personal use is illegal without permission of the copyright holder.

3. AC Fuse

The fuse is located inside the chassis and is not user-serviceable. If power does not come on, contact your Onkyo authorized service station.

4. Care

From time to time you should wipe the front and rear panels and the cabinet with a soft cloth. For heavier dirt, dampen a soft cloth in a weak solution of mild detergent and water, wring it out dry, and wipe off the dirt. Following this, dry immediately with a clean cloth. Do not use rough material, thinners, alcohol or other chemical solvents or cloths since these could damage the finish or remove the panel lettering.

5. Power

WARNING

BEFORE PLUGGING IN THE UNIT FOR THE FIRST TIME, READ THE FOLLOWING SECTION CAREFULLY.

- Some models are designed for use only with the power supply voltage of the region where they are sold.

European and Australian models:	AC 230V, 50Hz
U.S.A. and Canadian models:	AC 120V, 60Hz
Worldwide model:	AC 220-230V/120V switchable, 50/60Hz
Other:	AC 220V, 60Hz

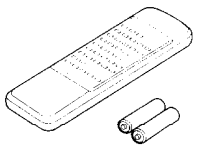
- **Voltage Selector (Rear Panel)**
  Worldwide models are equipped with a voltage selector to conform to local power supplies. Be sure to set this switch to match the voltage of the power supply in your area before plugging in the unit. Models without a voltage selector can only be used in areas where the power supply is the same as that of the unit.
- The power does not shut off completely by just turning the power off. So power cord should be removed from AC outlet when not in use for a prolonged time.

Memory Preservation

This unit does not require memory preservation batteries. A built-in memory power back-up system preserves the contents of the memory during power failures and even when the unit is unplugged. The unit must be plugged in order to charge the back-up system.

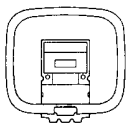
The memory preservation period after the unit has been unplugged varies depending on climate and placement of the unit. On the average, memory contents are protected over a period of a few weeks after the last time the unit has been unplugged. This period is shorter when the unit is exposed to a highly humid climate.

Supplied accessories

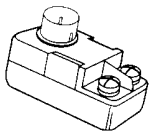


Remote controller (RC-328S) (1)
Batteries (size AA, R6, or UM-3) (2)

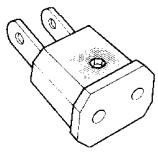
FM antenna (1)



AM loop antenna (1)

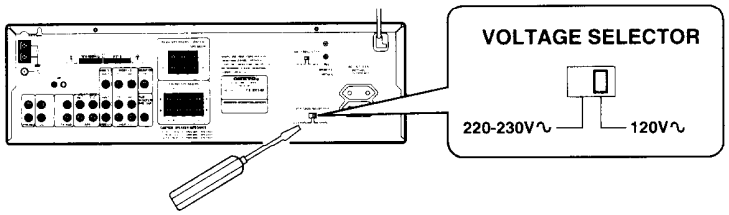


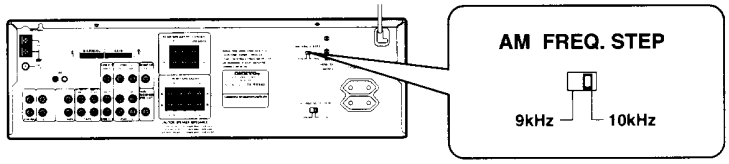
(worldwide and some other models)
75/300 ohm antenna adaptor (1)



(worldwide model only)
CV plug (Shape may vary according to the area where purchased.) (1)

Before operating this unit





Setting the voltage selector (worldwide model only)

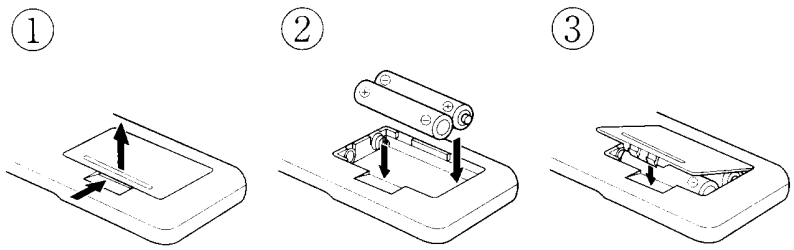
1. Determine the proper voltage for your area: 220 ~ 230 V or 120 V.
2. If the setting on the voltage selector is not correct, insert a screwdriver into the groove in the switch and slide the switch completely to the right (120 V) or the left (220 ~ 230 V), whichever is appropriate.

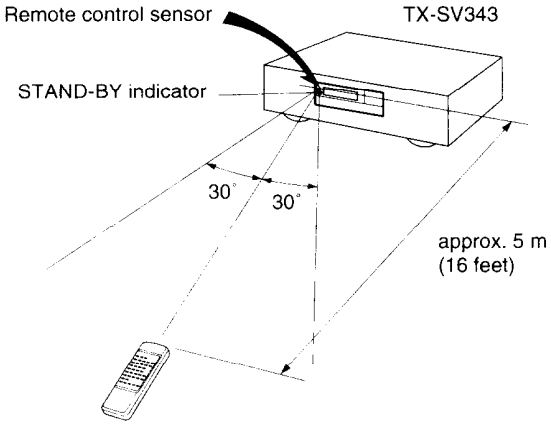
Setting the AM tuning step frequency (worldwide model only)

The worldwide model is equipped with a switch that controls the AM (9 kHz/ 10 kHz) band tuning steps.
Please set this switch to match the tuning step frequency in your area.

U.S. & Canada: 10 kHz
Other areas: 9 kHz

Insert the batteries into the remote control according to the illustration.





Using the remote control

The following information will help you get optimal use from the remote control.

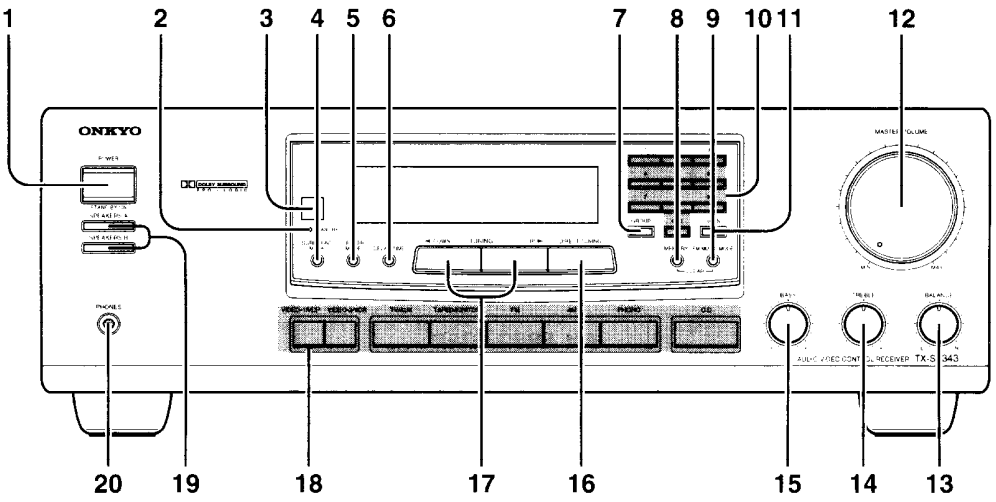
- Place this unit away from direct bright light which can prevent proper operation of the remote control.
- Make sure audio rack doors do not have tinted glass. Placing this unit behind such a door may prevent proper remote control operation.

Loading the batteries

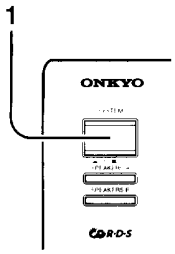
Remove the battery compartment cover by opening it as shown in the illustration. Load two AA (R6 or UM-3)-size batteries into the remote control with the plus (+) and minus (–) terminals positioned as indicated by the diagram inside the battery compartment, then close the cover.

- Immediately remove empty batteries to avoid corrosion damage.
- To avoid potential corrosion damage, never mix old batteries with new ones.
- The manganese batteries supplied with this unit have a service life of approximately six months, depending on the frequency of use.
- The TX-SV343 comes equipped with two AA (R6 or UM-3) manganese batteries, but we recommend that long-life AA (LR6 or AM-3) size alkaline batteries be used when replacing the batteries.

Control positions and names

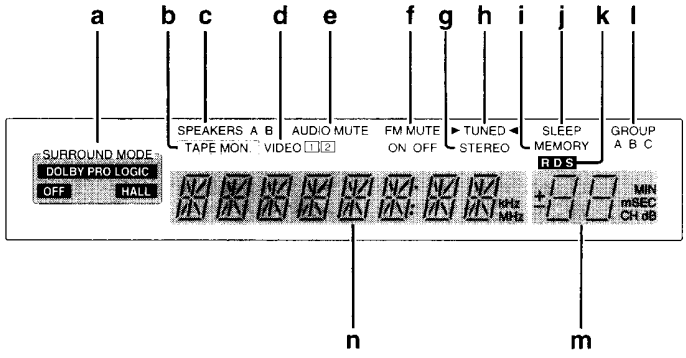


USA & Canadian model



Other than USA and Canadian model

Display



For more imformation about buttons or knobs, turn to page number listed in the [ ].

Front panel

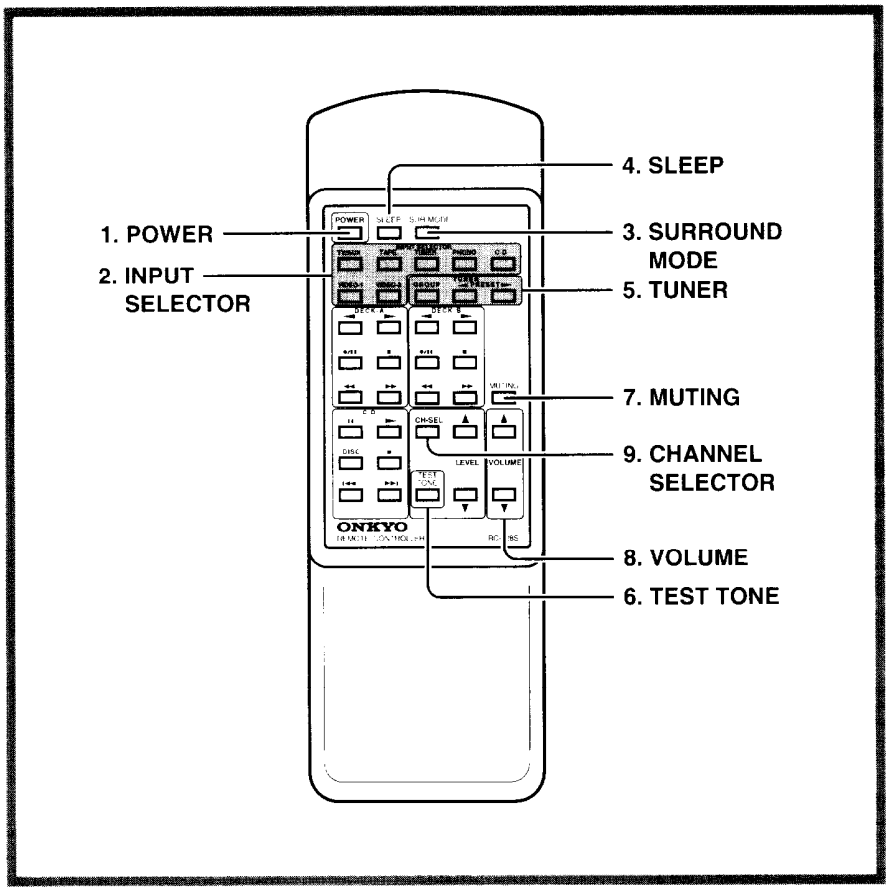
1. **Power switch (System switch) [11]**
2. **Stand-by/Received indicator [11]**
3. **Remote control sensor [5]**
4. **Surround Mode button [18, 19, 20]**
5. **Center Mode button [19]**
6. **Delay Time button [20]**
7. **Group button [17]**
8. **Memory button [17]**
9. **FM Mute/Mode button [16, 17]**
10. **Number buttons [16, 17]**
11. **Scan button [17]**
12. **Master Volume control knob [14, 20]**
13. **Balance control knob [14]**
14. **Treble control knob [14]**
15. **Bass control knob [14]**
16. **Direct Tuning button [16]**
17. **Tuning Up/Down buttons [16]**
18. **Input selector buttons [14, 21, 22]**
19. **Speaker selector buttons [14]**
20. **Headphone jack [15]**

Display

If there is a protective film on the surface of the display which is making it difficult to read the display, remove it.

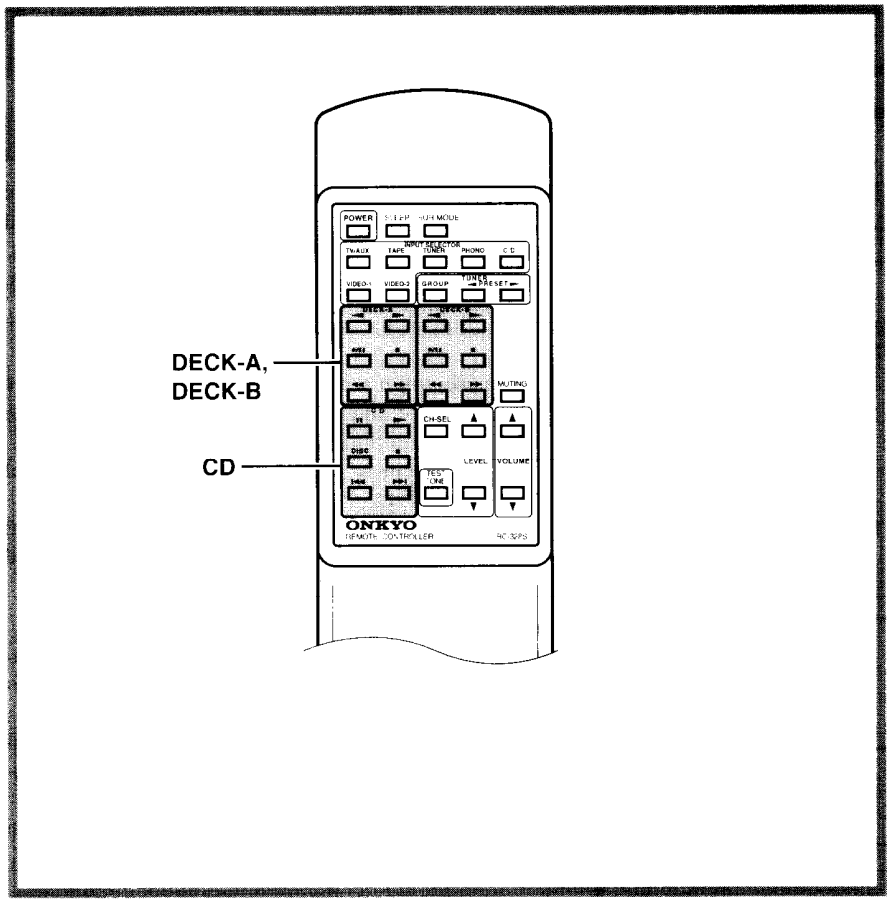
a. **Surround Mode indicators**
b. **Tape Monitor indicator**
c. **Speaker selector indicators**
d. **Video input selector indicators**
e. **Audio Mute indicator**
f. **FM Mute On/Off indicators**
g. **FM Stereo indicator**
h. **Tuned indicators**
i. **Memory indicator**
j. **Sleep indicator**
k. **RDS indicator (European models only)**
l. **Group indicators**
m. **Multi function display (Preset station/Sleep time/ Center & rear volume level/Delay time)**
n. **Multi function display (Frequency/Input selector)**

Control positions and names



Remote control

1. Power button [11]
2. Input Selector buttons [14, 21, 22]
3. Surround Mode button [18, 19, 20]
4. Sleep button [15]
5. Tuner operation buttons [17]
6. Test tone button [18, 19]
7. Muting button [15]
8. Volume up/down buttons [14, 20]
9. Channel Selector Button [18]



When you have made the RI connections (see page 8), you will be able to use the following buttons.

Tape deck operation buttons (DECK-A, DECK-B)

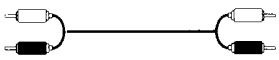
- ◄ : Reverse play button
- ► : Forward play button
- ●/❚❚ : Rec/pause button
- ■ : Stop button
- ◄◄ : Fast rewind button
- ►► : Fast forward button

- When only a single deck is used, operate DECK-B.

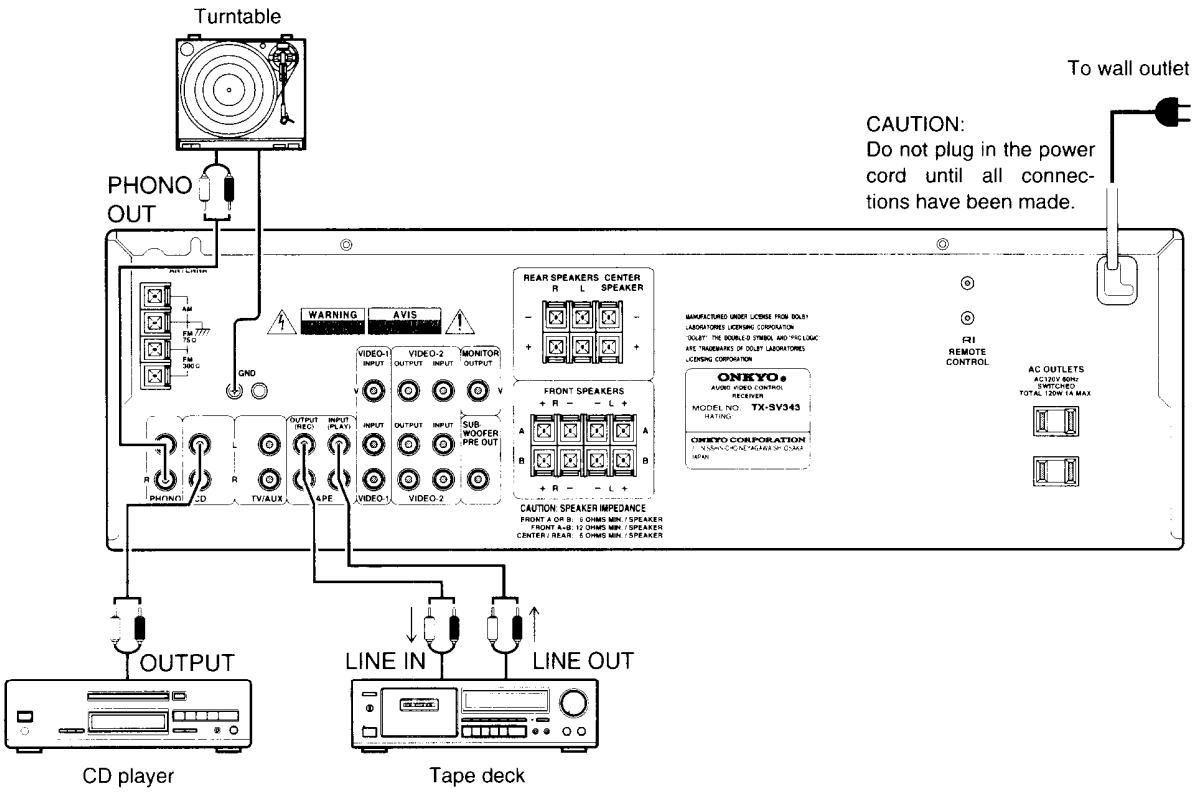
CD player operation buttons (CD)

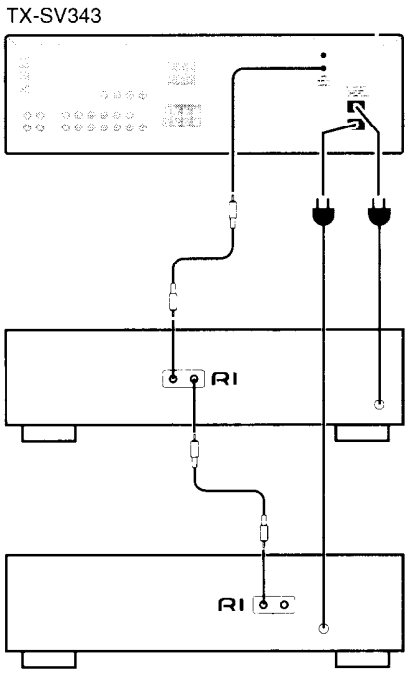
- DISC : Disc button for CD changer
- ► : Play button
- ❚❚ : Pause button
- ■ : Stop button
- ⏮ : Down button
- ⏭ : Up button

Connecting audio equipment



Refer to the instruction manual of each component when making connections.
On each pair of connectors, the lower connector (red and marked R) corresponds to the right channel and the upper connector (white and marked L) to the left channel.





Remote control connections

Cassette tape decks and a compact disc player that are equipped with an Onkyo RI connector can be operated using the remote control included with this unit.
To enable remote control operation of other components, connect the remote control cable as shown at the left.

NOTE:

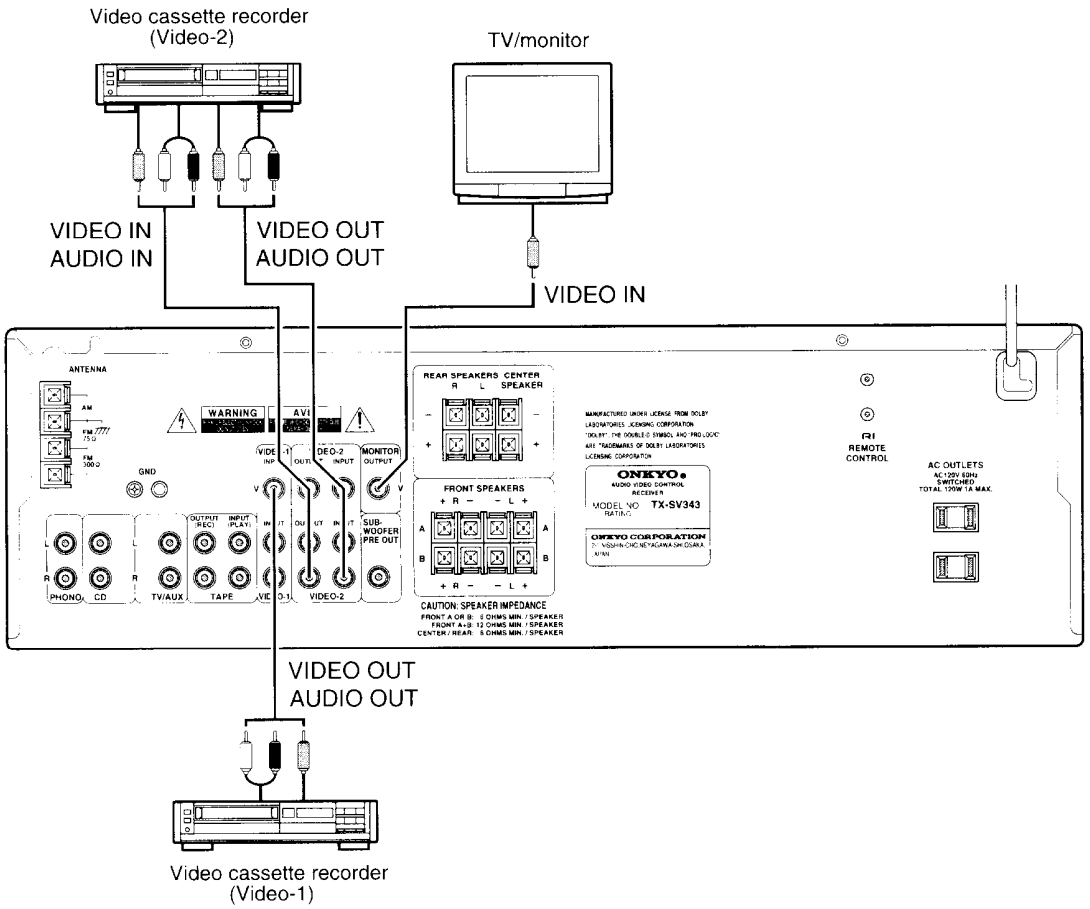
- To enable proper remote control operation, both the RI cables and the audio cables must be connected to the units.
- This unit's remote control cannot be used to control Onkyo turntables.
- An RI remote control cable equipped with 1/8" (3.5 mm) mini jacks is included with any other component installed with an RI connector.

The direct function feature

When a compact disc player, and tape deck with the RI connector are connected together, you can use the direct function feature.
Simply by directly operating the desired component (compact disc player or tape deck), this unit's Input Selector automatically switches to that component.
It is not necessary to switch this unit's Input Selector when changing listening sources.

Connecting video equipment

Refer to the instruction manual of each component when making connections.
On each pair of connectors, the lower connector (red and marked R) corresponds to the right channel and the upper connector (white and marked L) to the left channel.



If there should be interference between the TV and this unit, place this unit as far from the TV as possible. We do not recommend the use of a common TV/FM antenna. (Refer to *Connecting antennas* on page 12, 13.)

AC outlet connections

The power to components connected to the SWITCHED outlet is turned on and off using the power buttons on the front panel and remote control. (Note for European model: the remote control cannot be used when the POWER button on the front panel is set to the OFF.)

NOTE:

- The shape, number and total capacity of the AC outlets may differ according to the model and the area where the unit is purchased. Be careful that other components connected to this unit do not exceed the capacity that is printed on the rear panel above the AC outlets.

Connecting speakers

- Please connect each speaker according to the illustration, observing the correct connections for R, L, + and –.
- Do not use unnecessarily long or extremely thin speaker cables. If the DC resistance of the speaker cables is too high, the damping factor will decrease, adversely affecting the sound quality.

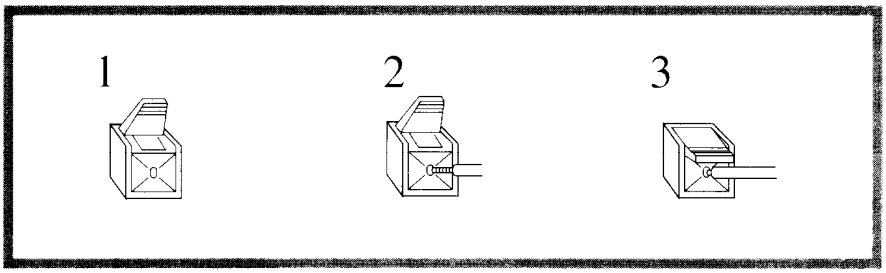
Speaker Impedance

This unit is designed to produce optimum sound quality when speakers with impedances within the set ranges are connected. Please check the following information and choose speakers with the necessary impedances for the connections.

FRONT SPEAKERS:

A or B : 6 ohms min./speaker
A + B : 12 ohms min./speaker

CENTER SPEAKER: 6 ohms min.
REAR SPEAKERS: 6 ohms min./speaker

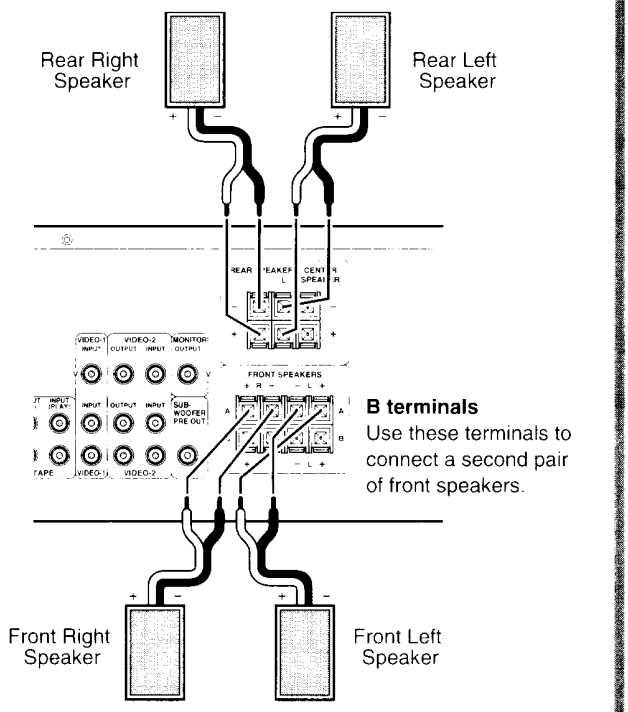


Connecting speaker cables

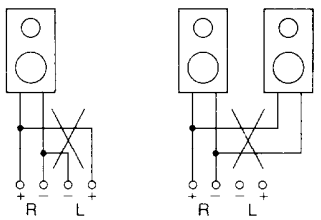
1. Open the lever.
2. Insert the wire.
3. Close the lever.

Before making any connections, please refer to the explanation of "Speaker impedance".

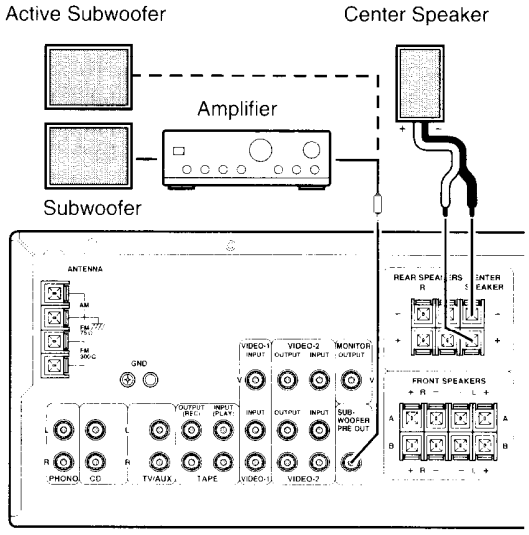
Front and Rear speakers


Rear Right Speaker
Rear Left Speaker
Front Right Speaker
Front Left Speaker
B terminals
Use these terminals to connect a second pair of front speakers.

- When using only one speaker or when you wish to listen to monaural (mono), the single speaker should never be connected in parallel to both the right and left channel terminals at once.



Center speaker and subwoofer

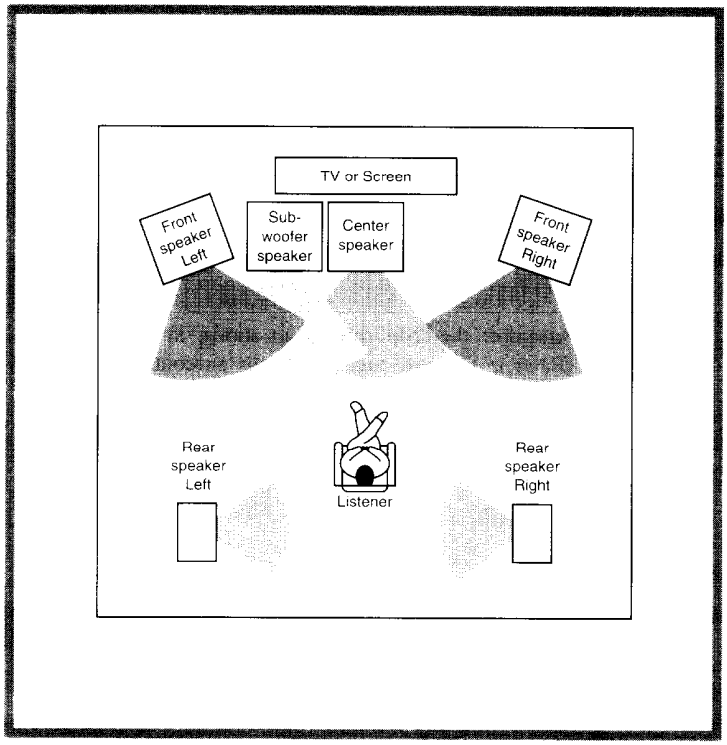


The SUBWOOFER PRE OUT jack can be connected to a subwoofer amplifier, or to a subwoofer with a built-in amplifier.

- When using any unit connected to the SUBWOOFER PRE OUT jack, set the SPEAKERS A button on the front panel to ON.

Positioning speakers

Speaker placement plays an important role in the reproduction of Surround sound. The manner in which the speakers are placed varies depending on the size of the room and the wall coverings used in the room. The illustration below shows an example of a layout for standard speaker placement. Refer to this example when positioning the speakers in order to experience the best of Surround sound.



Standard speaker placement

For ideal Surround effects, all speakers should be installed. If a center speaker or subwoofer is not connected, the sound from the unused channel is properly distributed to the connected speakers in order to produce the best Surround sound possible.

Front:

The left, right and center speakers should face the seated listener and be placed at ear level. The center speaker produces a richer sound image by enhancing the perception of the sound's source and movement.

Rear:

Place the left and right Rear speakers 1 m (3 feet) above the listener's ear level and toward the sides of the room, making sure that the listener is within the speakers' dispersion angle. These speakers produce the feel of a moving sound while generating the sensation of being in the middle of the action.

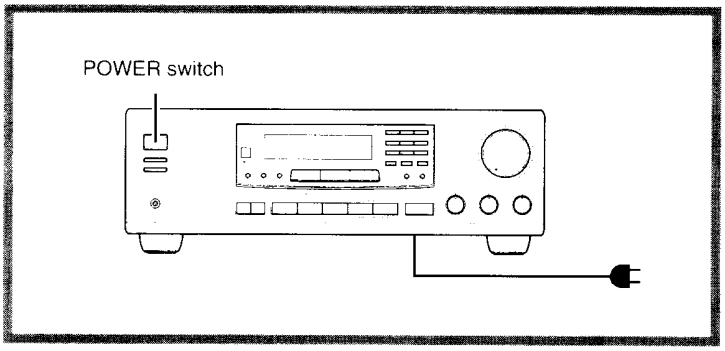
Subwoofer:

Install a subwoofer with a built-in power amplifier for powerful bass sounds. The placement of the subwoofer does not affect the final quality of the sound image too much, so you can install it with the room layout in mind.

Refer to the speaker instruction manual for more details.

Connecting the power

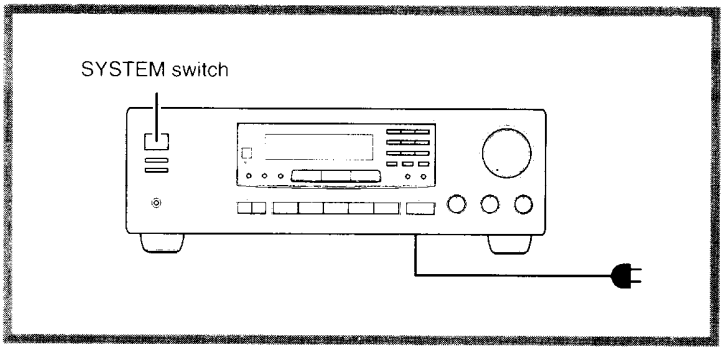
Before plugging in the unit, confirm that all connections have been made properly.
Before turning on the power, be sure that the MASTER VOLUME control knob is fully turned counterclockwise.
Turning on this unit's power may cause a momentary power surge, which might interfere with other electrical equipment, such as computers. If so, use a wall outlet on a different circuit.



U.S. and Canadian models:

Plugging the TX-SV343's power cord into an AC outlet puts the unit in stand-by status (the STAND-BY indicator is lit). Pressing the POWER switch turns on the unit and lights up the Display. If this switch is pressed again, the unit returns to the stand-by status.

The POWER button on the remote control is used in the same way as the POWER switch on the TX-SV343.



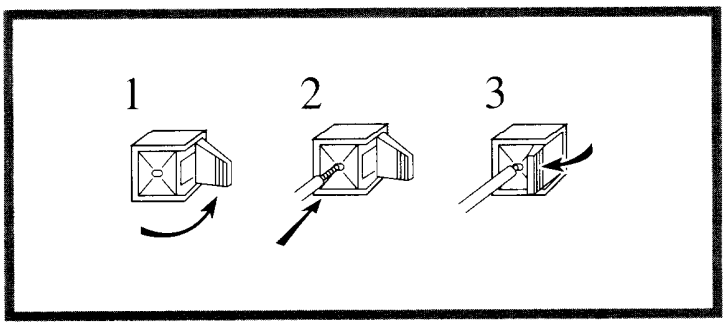
Models other than U.S. and Canadian models:

After plugging the TX-SV343's power cord into an AC outlet, press the SYSTEM switch to put the unit in power-on status (the unit can be operated and its display is lit). The remote control cannot be used to operate the TX-SV343 if the SYSTEM switch is not set to ON.

When the SYSTEM switch is set to ON, pressing the POWER button on the remote control switches the TX-SV343 between stand-by status (the STAND-BY indicator is lit) and power-on status (the Display is lit).

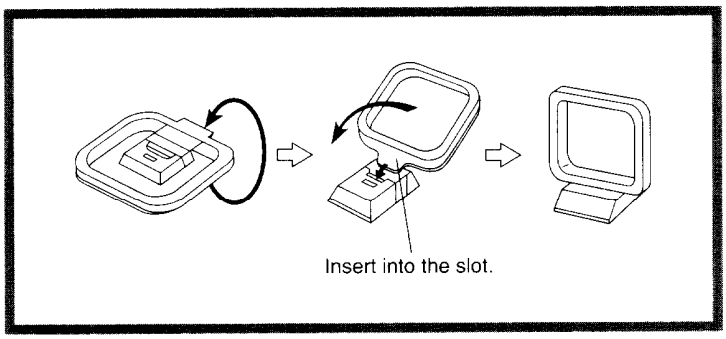
Pressing the SYSTEM switch on the TX-SV343 to set it to OFF turns off the unit. (When the SYSTEM switch is set to OFF, only a small amount of power is used.)

Connecting antennas



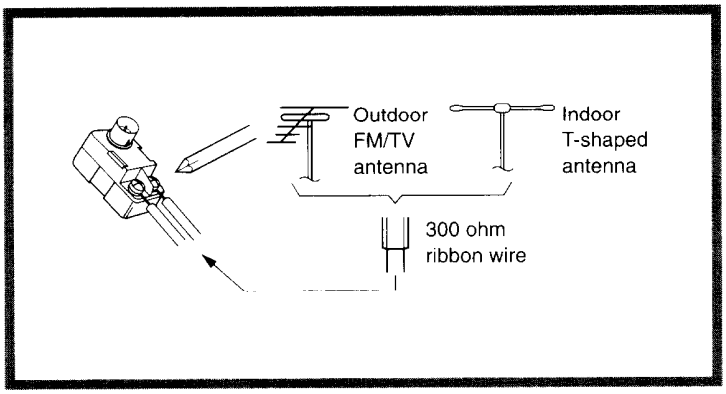
Antenna cables

1. Press down on the lever.
2. Insert the wire.
3. Return the lever.



AM loop antenna

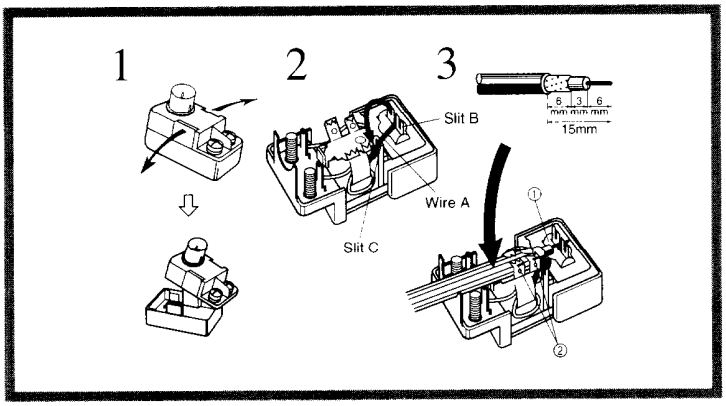
Assemble the loop antenna as shown in the illustration. (Refer to the next page for details on connecting the AM loop antenna.)



75/300 ohm adaptor (worldwide and some other models)

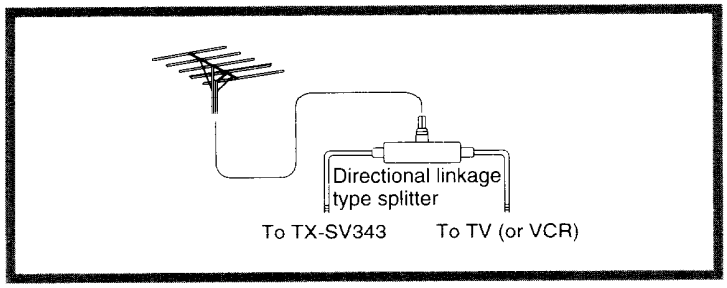
Connecting the T-shaped antenna or 300 ohm ribbon wire to the 75/300 ohm adaptor

Loosen the screws and wrap the wires around them. Then, tighten the screws with a screwdriver.



Connecting the coaxial cable to the 75/300 ohm adaptor

1. With your fingernail or a small screwdriver, pull the stoppers outwards and remove the cover.
2. Remove the transformer wire A from slit B and insert it into slit C.
3. Prepare the coaxial cable as shown in the illustration. Connect the coaxial cable to the 75/300 ohm antenna adaptor.
   ① Insert the end of the cable.
   ② Use pliers to pinch it and keep it in place.
4. Re-install the cover.



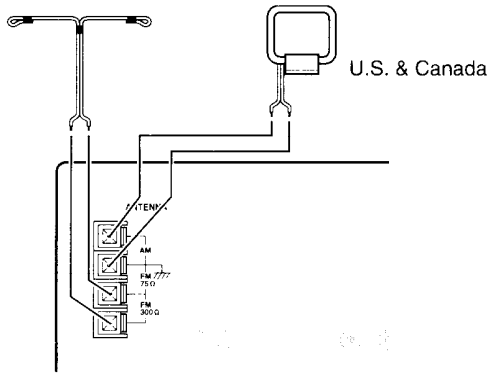
Directional linkage

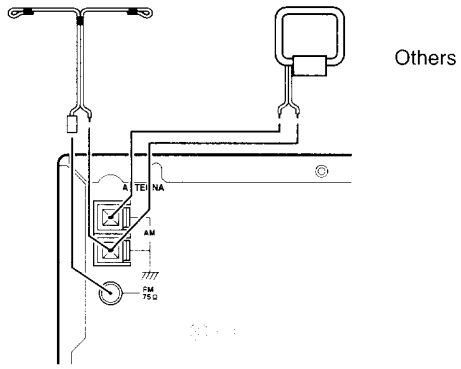
Do not use the same antenna for both FM and TV (or VCR) reception since the FM and TV (or VCR) signals can interfere with each other. If you must use a common FM/TV (or VCR) antenna, use a directional linkage type splitter.

Connecting antennas

T-shaped FM antenna and AM loop antenna

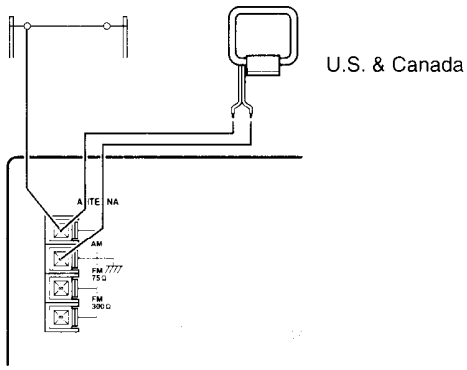
The T-shaped FM antenna is for indoor use only. Extend the antenna and move it until the clearest signal is received. Use tacks or similar objects to fix it in the T-shaped arrangement giving the least amount of distortion.
The AM loop antenna is also for indoor use only. Position it where the clearest sound is received. Put it as far as possible away from this unit, the TV, speaker cables and power cords.
If clear signals cannot be received using only the enclosed T-shaped FM antenna or AM loop antenna, connect an outdoor FM or outdoor AM antenna as needed.

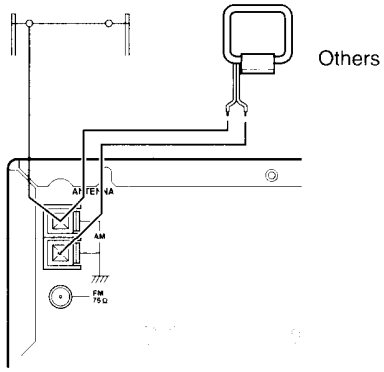




Outdoor AM antenna

The outdoor AM antenna will be more effective if it is stretched horizontally above a window or outside. (Do not disconnect the AM loop antenna.)

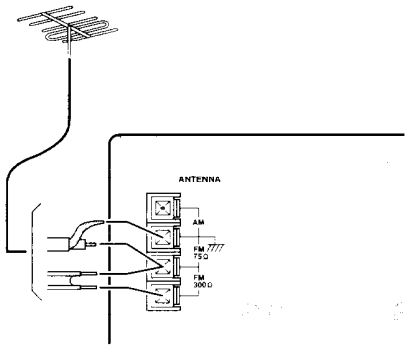


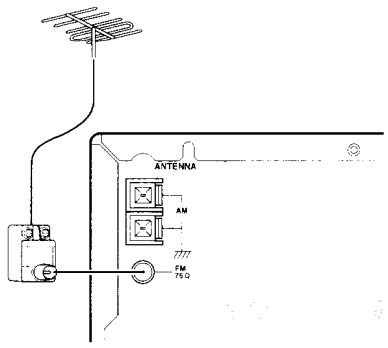


Outdoor FM antenna

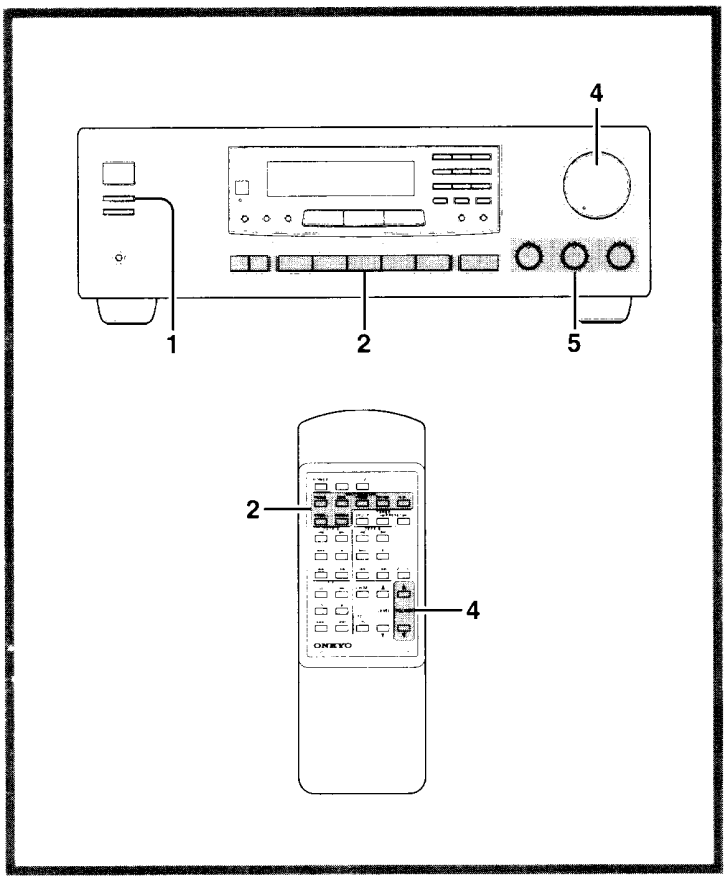
Be sure that the outdoor FM antenna is positioned as follows:

- Keep the antenna away from noise sources, such as neon signs and busy roads.
- Do not position it near power lines, etc. This is very dangerous.



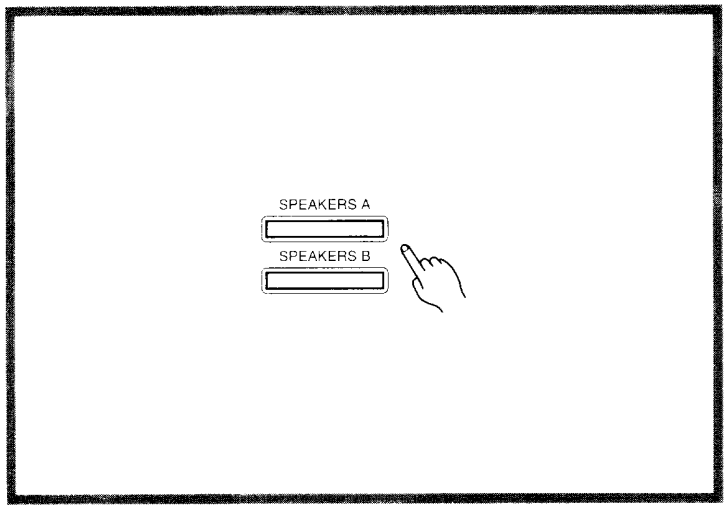


Listening to your favorite source



Basic operations

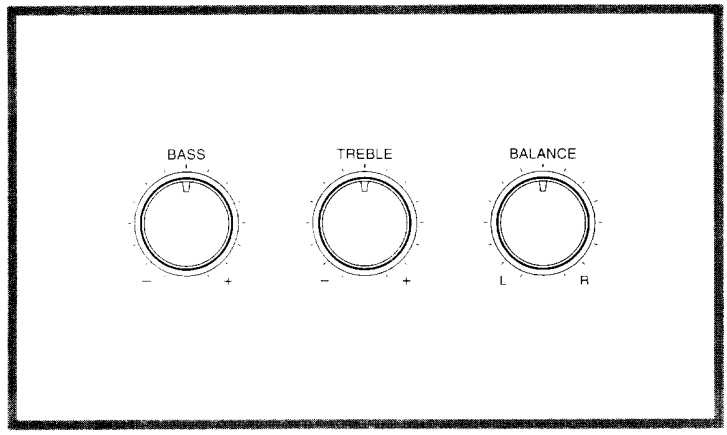
1. **Press the SPEAKERS A button.**
   SPEAKERS A indicator lights up.
2. **Press the desired input selector button (e.g. PHONO).**
   The appropriate letters (e.g. PHONO) appear on the display. Confirm that the TAPE MON. indicator is off when a source other than the TAPE (MONITOR) has been selected. Also check the audio muting is off.
3. **Start the selected input source playing.**
   Follow the operating instructions of that unit.
4. **Adjust the volume to appropriate level using the MASTER VOLUME control knob or VOLUME ▲ (up)/▼ (down) buttons on the remote control.**
5. **Adjust the tone controls for your desired tone.**



Speaker selector

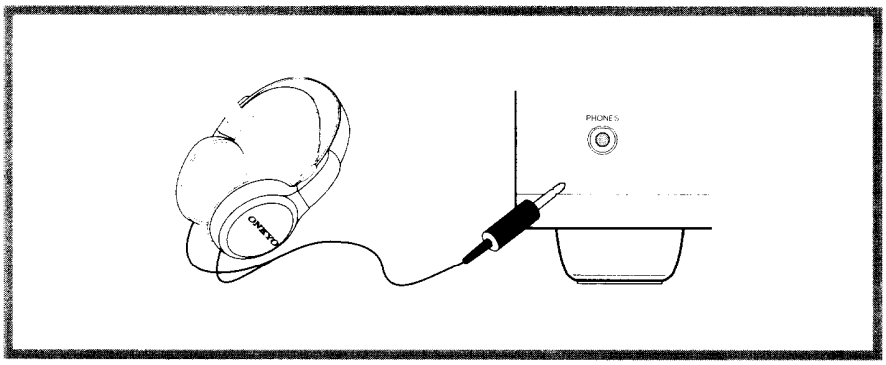
SPEAKERS A: This button turns on or off the speakers connected to the FRONT A, CENTER and REAR SPEAKERS terminals. When the speakers are turned on, the SPEAKERS A indicator lights up.
SPEAKERS B: This button turns on or off the speakers connected to the FRONT B SPEAKERS terminals. When the speakers are turned on, the SPEAKERS B indicator lights up.

Note:
Surround sound activated can not operate A + B speaker simultaneously.



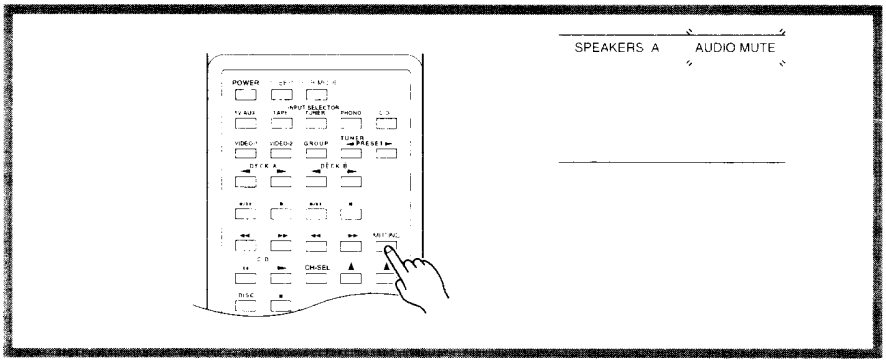
Adjusting the tone and balance

Treble and Bass are effectively only for the Front left and right speakers.
The best results are obtained from DOLBY PRO LOGIC Surround when the center and left and right front speakers contain the same amounts of mid and high frequencies. As the Treble and Bass control do not affect the Center speaker, adjust the tone controls for the left and right front speakers to match the sound given by the center speaker. Because of this, we recommend the use of a good quality center speaker.
BASS: Adjust to strengthen or weaken bass response.
TREBLE: Adjust to strengthen or weaken treble response.
BALANCE: Use to adjust the relative volume levels of the right and left front speaker systems and headphones.



Headphones

Stereo headphones with a standard stereo jack plug can be connected to the PHONES jack. The sound heard through the headphones is the same sound that can be heard from the Front speakers, although it may be slightly different from what is heard from the speakers when the Surround mode is used. (The sound from the headphones may sound a little distant.)

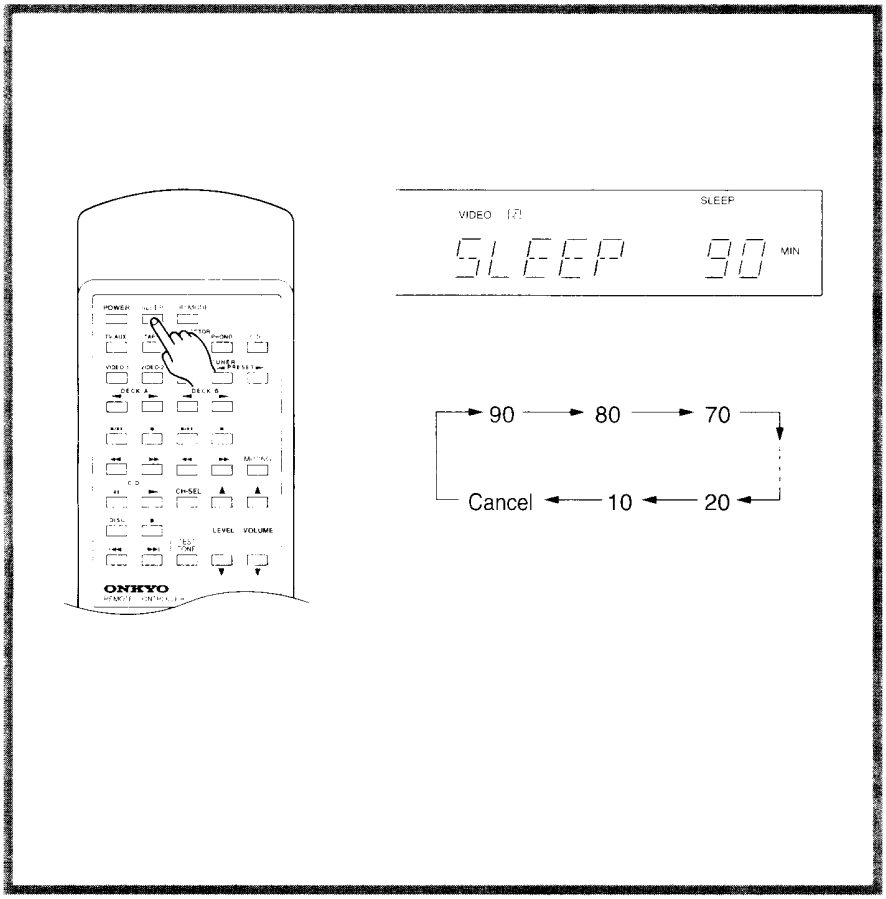


Temporary muting

Press the MUTING button on the remote control.
This button temporarily switches off the sound from the speakers or headphones.
The AUDIO MUTE indicator will flash.

To cancel,

- press the MUTING button again, *or*
- turn the power off, then on.



Sleep facility

The sleep timer can power off the system after a specified time period.
To operate this function, use the remote control supplied with your TX-SV343.

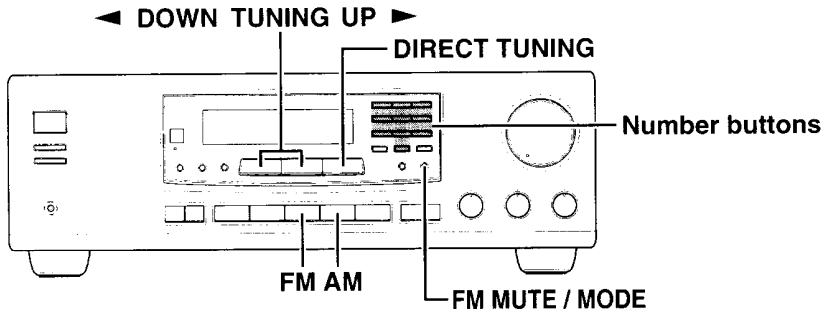
1. **Start the source playing that you would like to listen to. (CD, tape or radio broadcast)**
2. **Set the amount of time after which you want the system to turn off.**

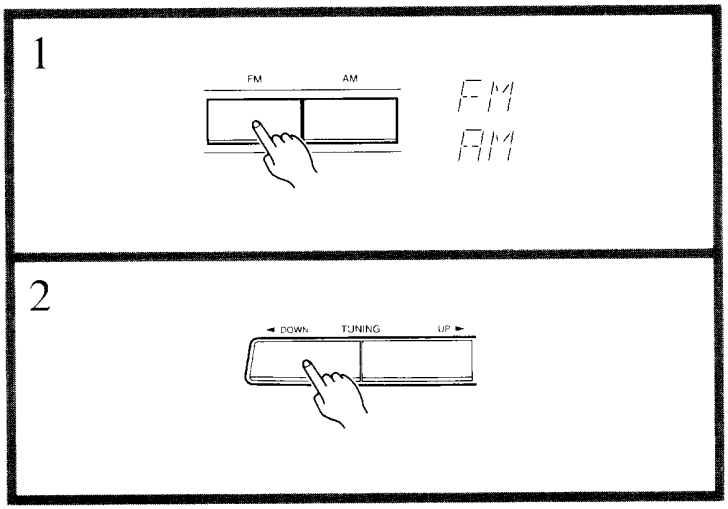
The sleep timer works for up to 90 minutes. You can shorten the timer by 10 minutes increments by pressing the SLEEP button until the desired time has been reached.
When the set time comes, the power will be switched off automatically.

Cancelling the sleep setting

Press the SLEEP button until it changes to the source display you are listening to.
or
The timer can also be cancelled while it is in operation, by turning off the power.

Tuning in a radio station



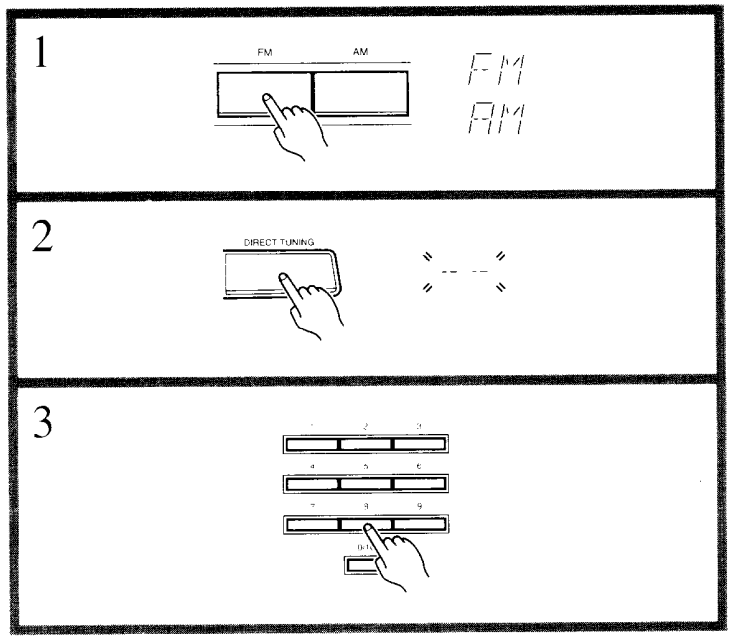


Manual tuning

1. **Press either the FM or AM button on the main unit.**
2. **Change the frequency using the ◄ DOWN or UP ► TUNING button.**
   Press the ◄ DOWN TUNING button to decrease the frequency and press the ► UP TUNING button to increase the frequency.
   The TUNED indicator in the display lights up when the station is properly tuned in.

In FM, each press of a TUNING button changes the frequency in 100 or 50 kHz steps; in AM, the frequency changes in steps of 9 or 10 kHz, depending on the area where the unit is used.

If a button is continuously held down for more than 0.5 seconds while tuning an FM station, the frequencies are scanned and tuning automatically stops when a broadcast is received.

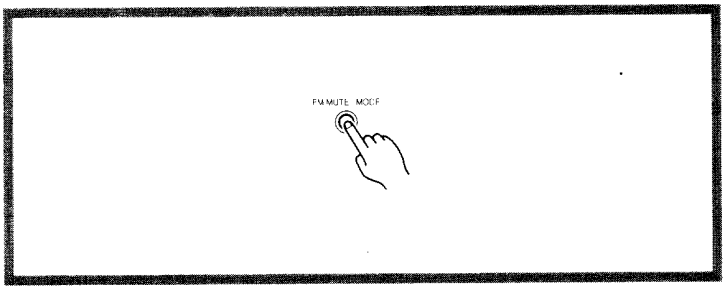


Direct tuning

1. **Press either the FM or AM button on the main unit.**
2. **Press the DIRECT TUNING button.**
   "-- --" flashes in the display for 16 seconds.
3. **While "-- --" flashes, enter the frequency using the number buttons.**
   For example, to enter "88.10 MHz", press the 8, 8, 1, then 0/10 number buttons.
   The TUNED indicator in the display lights up when the station is properly tuned in.

If you enter a frequency that is out of range, the frequency display will flash and the unit will return to the previous frequency.

U.S./Canadian and worldwide models (in 10 kHz step mode):
Since the AM frequency changes in 10 kHz steps, any number entered in the 1 kHz digit position automatically changes to 0.

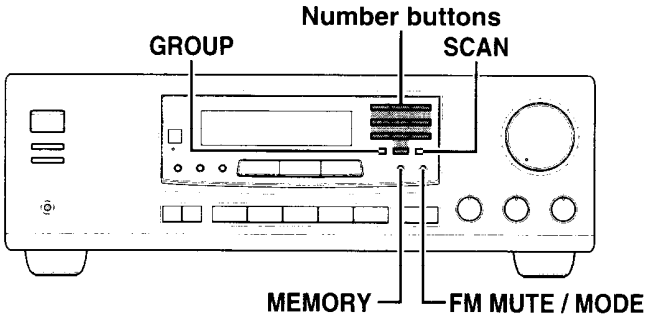


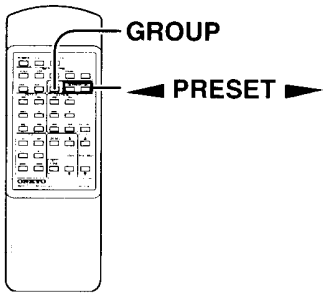
Tuning in an FM stereo radio station

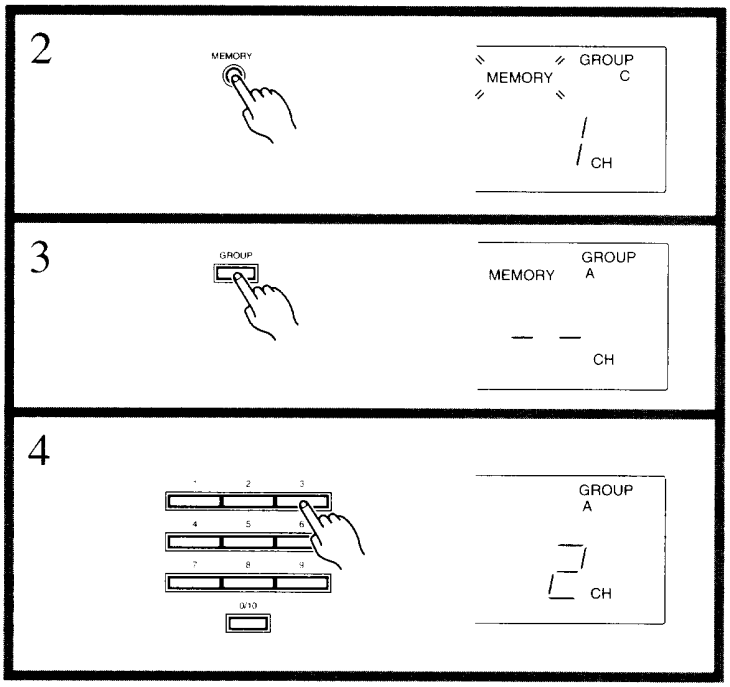
If you tune in a stereo FM station, the STEREO indicator lights up if the signal is sufficiently strong. If the signal is weak, it may be impossible to tune in the station.

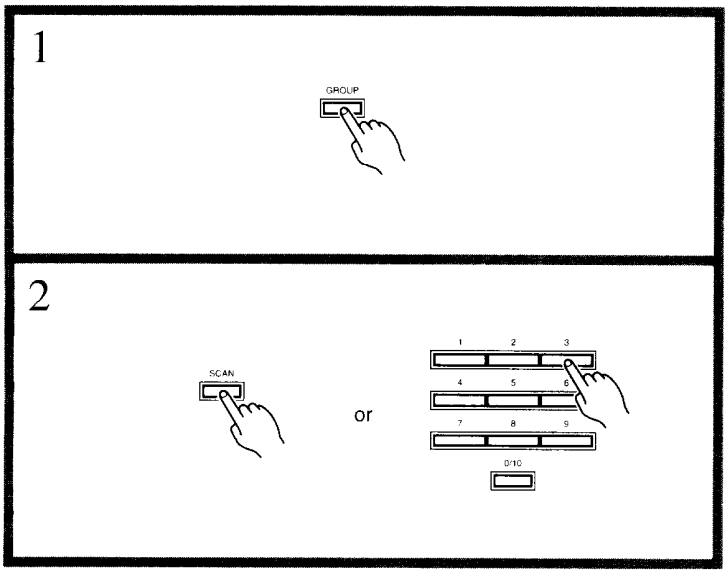
1. **Press the FM MUTE/MODE button on the main unit.**
   The FM MUTE OFF indicator lights up. This changes the broadcast to mono, so interstation noise can be heard.
2. **Select the station that you want to listen to.**

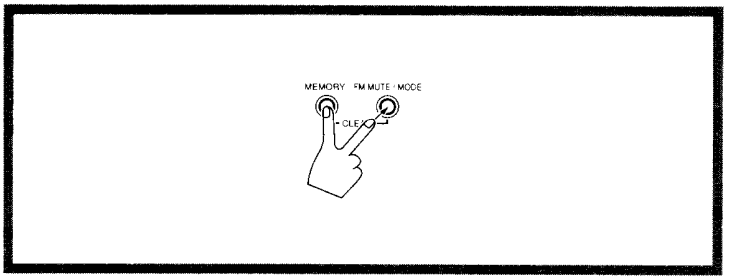
Using preset radio stations











Setting a preset station

1. **Select the radio station frequency that you want to store in the memory.**
   (Refer to *Tuning in a radio station* on page 16.)
2. **Press the MEMORY button on the main unit.**
   The MEMORY indicator in the display lights up for 8 seconds.
3. **While the MEMORY indicator is lit, continue pressing the GROUP button until the desired group is selected.**
   With each press of the button, the group name that is shown on the display changes one at a time in the following sequence: A → B → C →A...
4. **Enter the desired preset number using the number buttons.**
   Press the 0/10 number button when choosing preset number 10.

NOTE (European models only):
If the selected FM station broadcasts RDS signals with a PS (Program service name), the name of the station is displayed instead of the frequency. If there is no PS, the frequency is displayed.

Selecting a preset station

First, select the tuner as the source by pressing the AM or FM input selector button on the main unit.

1. **Press the GROUP button until the desired group is displayed.**
2. **Enter the desired preset number using the number buttons or press the SCAN button to scan through the preset stations.**
   If the SCAN button is pressed, each station stored in the selected group will be played for 5 seconds. When the desired station is found, press the SCAN button again to stop scanning.

Remote control operation
First, select the tuner as the source by pressing the TUNER input selector button on the remote control.

1. **Press the GROUP button until the desired group is displayed.**
2. **Press the PRESET (◄ or ►) button.**

Cancelling preset stations

1. **Select the station that you want to cancel.**
   (Refer to *Selecting a preset station* above.)
2. **Hold down the MEMORY button on the main unit and press the FM MUTE/MODE button.**
   "--" appears in the display.

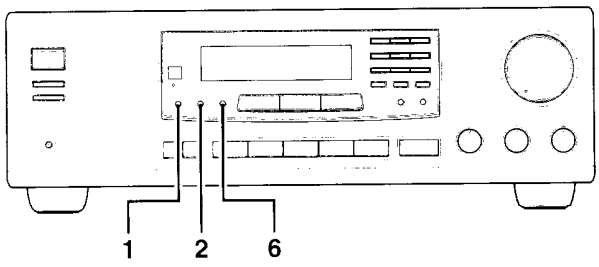
Selecting a Surround mode

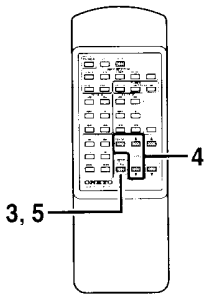
Surround system

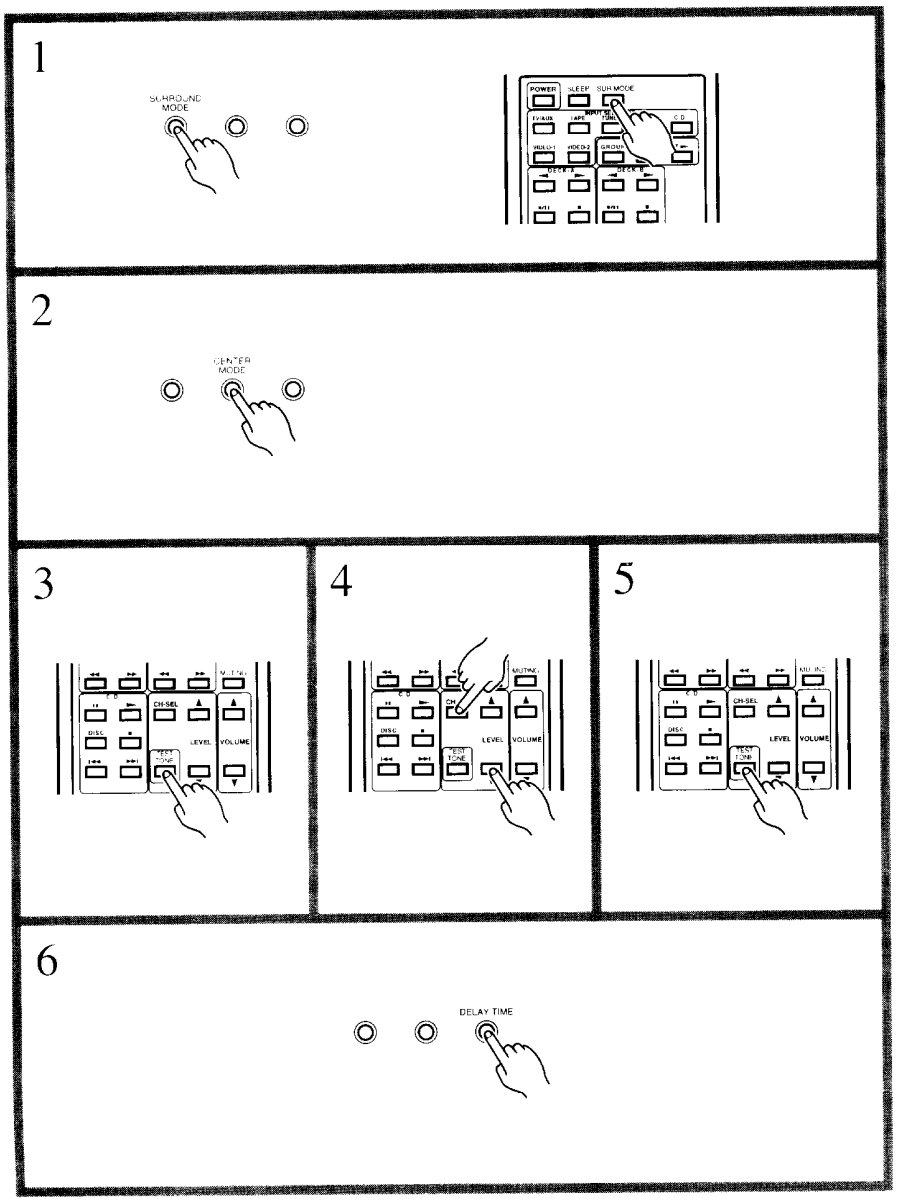
Surround system

Since the TX-SV343 is equipped with a front amplifier, center amplifier and a rear (surround) amplifier, Dolby Pro Logic Surround effects can all be produced. When you using video cassette tapes or video discs that have the DOLBY STEREO or DOLBY SURROUND trade mark, you can enjoy the feeling of a movie theater in your own room. When reproducing these effects, placement of the rear (surround) speakers is important for optimum sound quality in your room.

If there are differences in the volume levels of the speakers when enjoying Dolby Pro Logic Surround, you will not be able to get the best effect. You should use the test tone to adjust all the speakers to the same volume level.





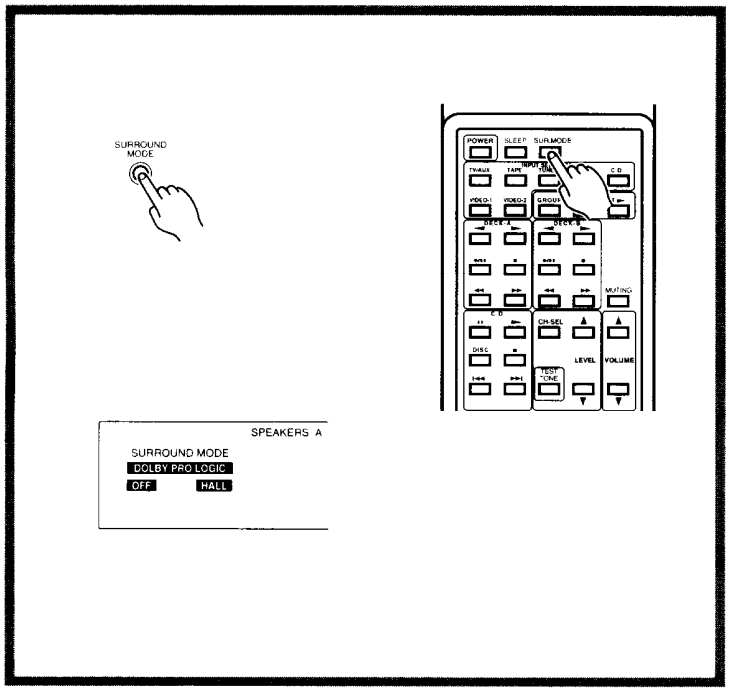


Adjusting the speaker volumes before enjoying Dolby Pro Logic Surround

Before operating: Be sure to turn on SPEAKERS A and turn off SPEAKERS B when enjoying Dolby Pro Logic Surround.

1. **Select a source encoded with Dolby Surround and use the SURROUND MODE button to select DOLBY PRO LOGIC mode.**
2. **Use the CENTER MODE button to select a center mode.**
   When the button is pressed, the mode will change as shown below.
   ┌→NORMAL → WIDEBAND → PHANTOM┐
   (Refer to page 19 for details of these modes.)
3. **Press the TEST TONE button on the remote control.**
   (Refer to *Test Tone* on page 19 for details.)
4. **From your listening position, use the remote control to adjust the relative volume level of the test tone from the different speakers.**
   Adjust the volume levels of all of the speakers with the VOLUME ▲ (up) and ▼ (down) buttons.
   Press the CH.SEL button on the remote control until CENTER is selected and use the LEVEL ▲ or ▼ button to adjust the center speaker level to match the front left and right speaker levels. Then, press the CH.SEL button on the remote control to select REAR and use the LEVEL ▲ or ▼ button to adjust the levels of the rear speakers.
   - If the center mode is set to PHANTOM, only REAR can be selected by the CH.SEL buttons.
5. **Press the TEST button again and stop the pink noise.**
6. **Use the DELAY TIME button to set the delay time.**
   (Refer to page 20 for details.)

Selecting a Surround mode



Surround Mode

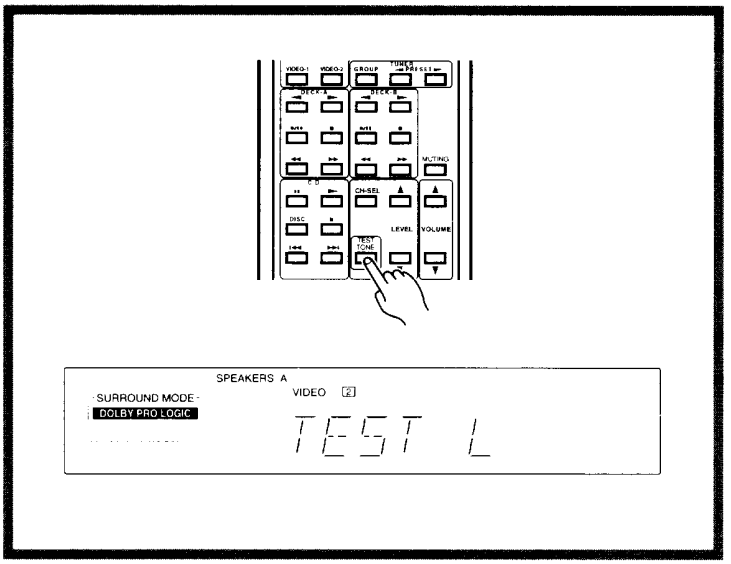
Select a mode by pressing the SURROUND MODE button. Make your choice of modes depending on the type of music you are listening to, the media used, and your personal preference.

DOLBY PRO LOGIC: By using video tape and laser discs with the Dolby Surround trade mark, you can decode four channel Surround sound.

HALL: Simulates the atmosphere of a concert hall. Intended for classical music.

OFF: This mode is used when you do not wish to use the Surround mode. All input sound is output from the front speakers directly.

- The selected surround mode (Dolby Pro Logic, Hall or Off) is automatically stored along with the selected source. When the same source is subsequently selected, the stored surround mode will be automatically recalled.



Test Tone

Use the test tone to adjust the volume level of each of the speakers before enjoying Dolby Pro Logic Surround.

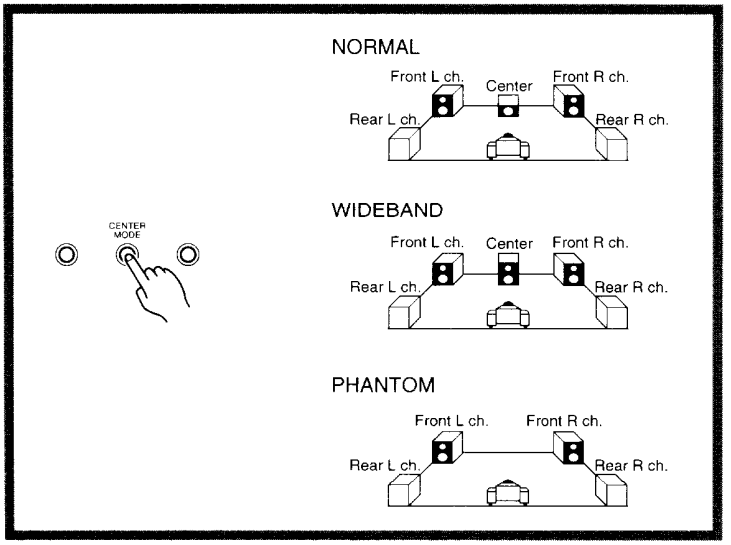
The test tone (pink noise) is produced by each speaker in turn so you can match the volume levels of the Front, Center and Rear speakers. The test tone cycling sequence depends on the center mode settings, as follows.

If CENTER MODE is NORMAL or WIDEBAND:

→ Front Left→Center→Front Right→Rear

If CENTER MODE is PHANTOM:

→ Front Left ——→Front Right ——→Rear



Center Mode

Because the Center speaker plays such an important part in Dolby Pro Logic surround, three different modes are available for it, depending on its size.

Select a mode by pressing the CENTER MODE button.

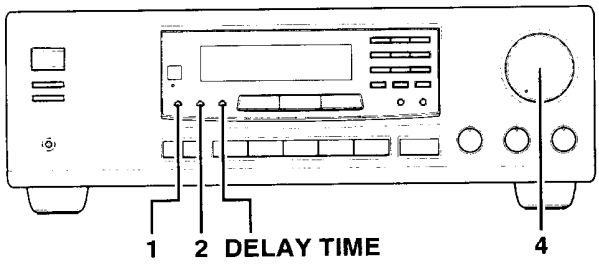
NORMAL: Use this setting when using a Center speaker smaller than the Front left and right speakers.

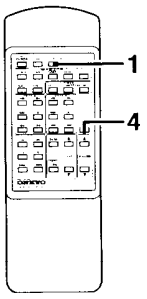
WIDEBAND: Use this setting when using a Center speaker similar to the Front left and right speakers in size and power.

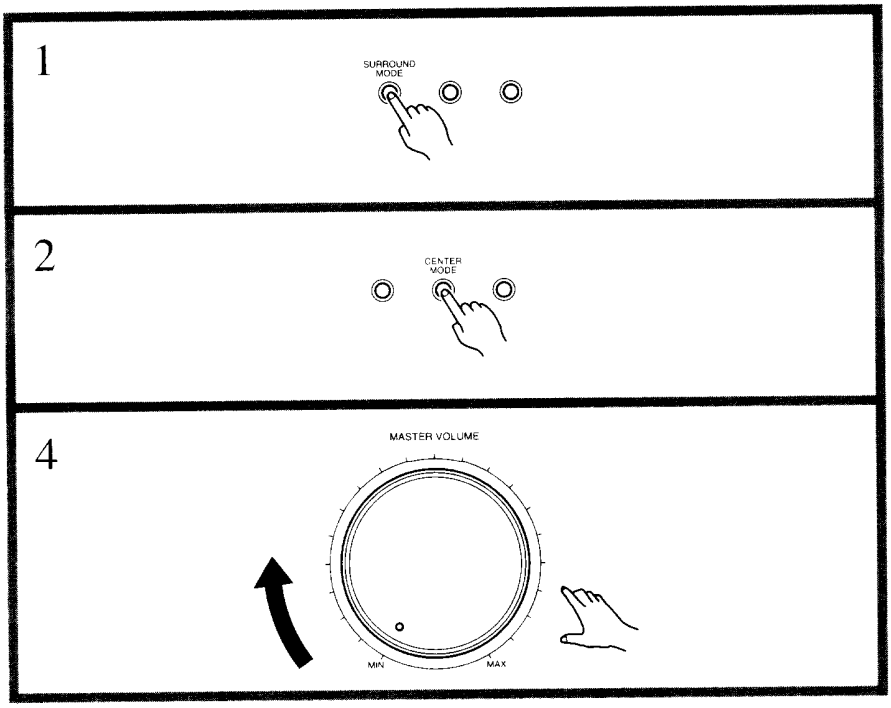
PHANTOM: Use this setting when a Center speaker is not present.

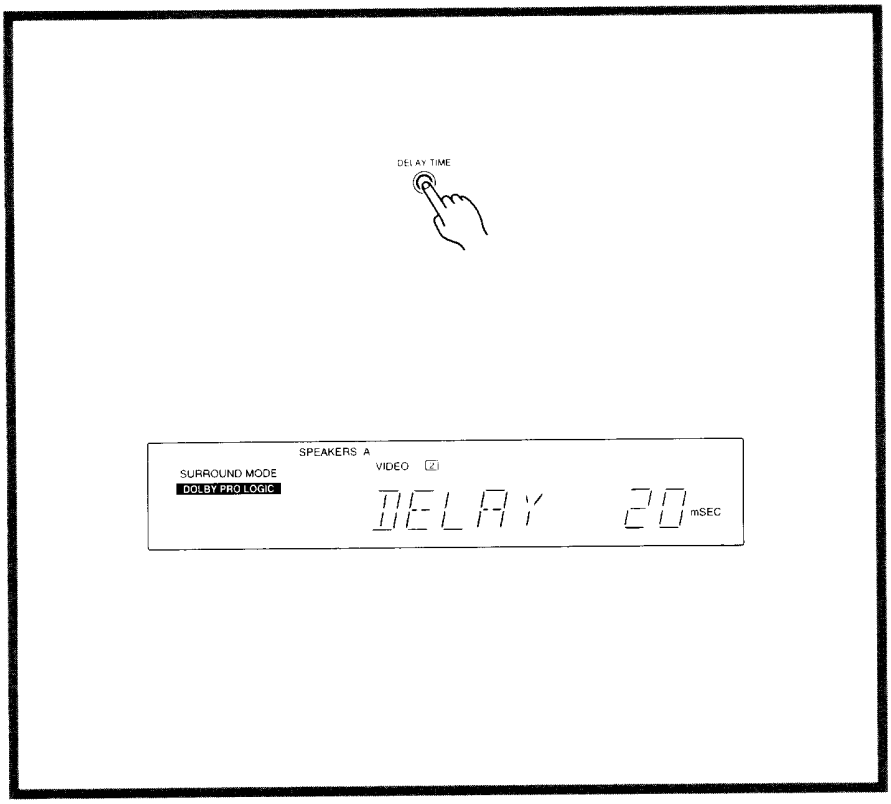
- When you press the CENTER MODE button, the name of each mode will be shown on the display for 3 seconds in turn.

Selecting a Surround mode









Enjoying a Surround Mode

1. **Use the SURROUND MODE button to select the surround mode.**
   Select DOLBY PRO LOGIC or HALL. (Refer to page 19 for details of the Surround modes.)
2. **If DOLBY PRO LOGIC was selected in step 1, use the CENTER MODE button to select the center mode.**
3. **If DOLBY PRO LOGIC was selected in step 1, play a Dolby Surround-encoded source.**
4. **Adjust the MASTER VOLUME control knob.**

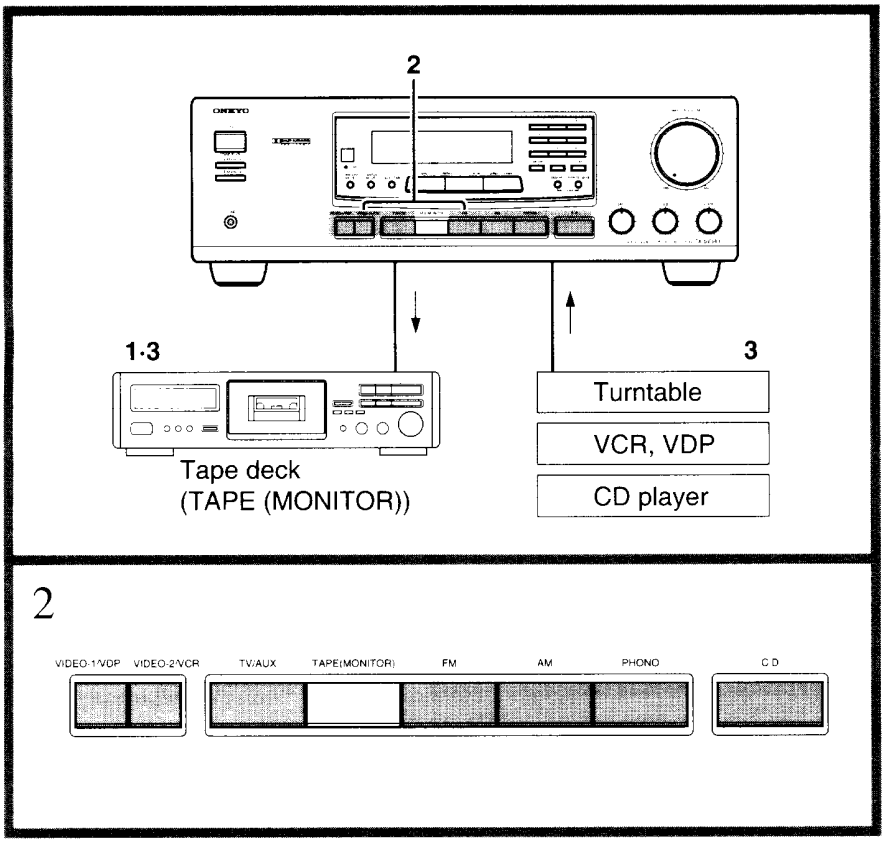
- Treble, Bass and Balance controls are effective only for the Front left and right speakers. The best effect from Dolby Pro Logic Surround can be obtained when equal settings are used for the sound from the L/R front speakers and the sound from the center speaker for the middle and treble ranges.

Delay Time

You can change the delay time for the sound from the rear (surround) speakers. Pressing the DELAY TIME button changes the delay time every 5 msec during a period of 15 to 30 msec in Dolby Pro Logic and every 5 msec during a period of 5 to 30 msec in Hall. Dolby Surround delay time is specified at 20 msec. It is recommended that initial Dolby Surround delay time be set at 20 msec, and adjustment to either 15 or 30 possible via the control. By adjusting the delay time, and carefully adjusting Master Volume Level, Center Volume Level and Rear Volume Level, the apparent acoustic size of your listening room can be enlarged or deduced. Adjustable delay time allows you to tailor the acoustic size of your listening environment to match the sonic characteristic spaces, such as concert halls, cathedrals, etc. Use a shorter delay to simulate the size of a small club or cabaret. Respective delay time can be memorized for each surround mode.

- When you press the DELAY TIME button, DELAY and the delay time will be shown for 3 seconds on the display.

Recording a source



Recording an audio source

Please read the instruction manuals concerning the operation of each unit.

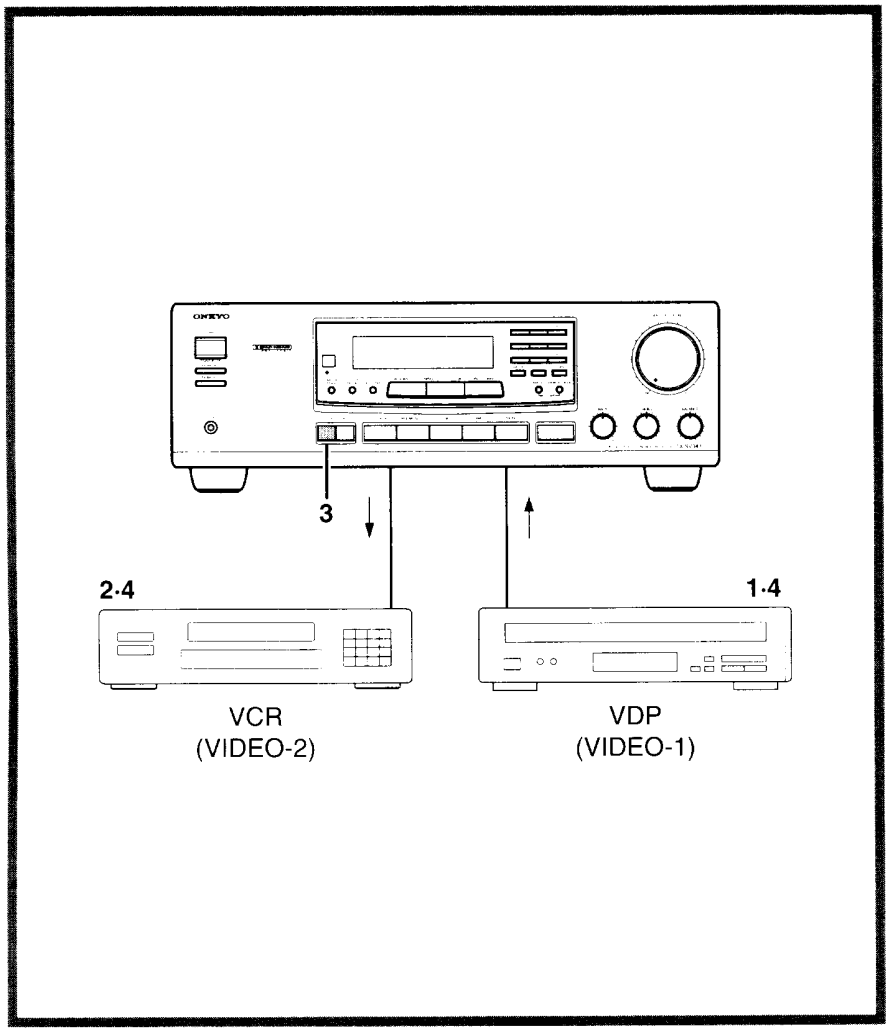
1. **Insert a blank tape into the tape deck.**
2. **Press the button of input selector for the source from which you want to record.**

- When VIDEO-1/VDP or VIDEO-2/VCR is selected, it will (naturally) only record the audio.
- When FM or AM is selected, set the tuner to the station you want to record from.

3. **Put the tape deck in the recording mode. Begin playing the source.**

Set the proper recording level using the controls on the tape deck used for recording. Also, during recording operation, if any controls (bass, treble etc.) on this unit are changed during recording operation, the tone effects will not change.

If a monitor is being used, refer to page 22.



Video disc player (or video camcorder) to VCR recording

1. **Insert the LD or tape that you want to record into the VDP or VCR connected to VIDEO-1.**
2. **Insert a blank video tape in the VCR connected to VIDEO-2.**
3. **Press the VIDEO-1/VDP button.**
4. **Begin playback of the video connected to VIDEO-1 and start recording on the VIDEO-2.**

Adding new sound to a video tape during video editing

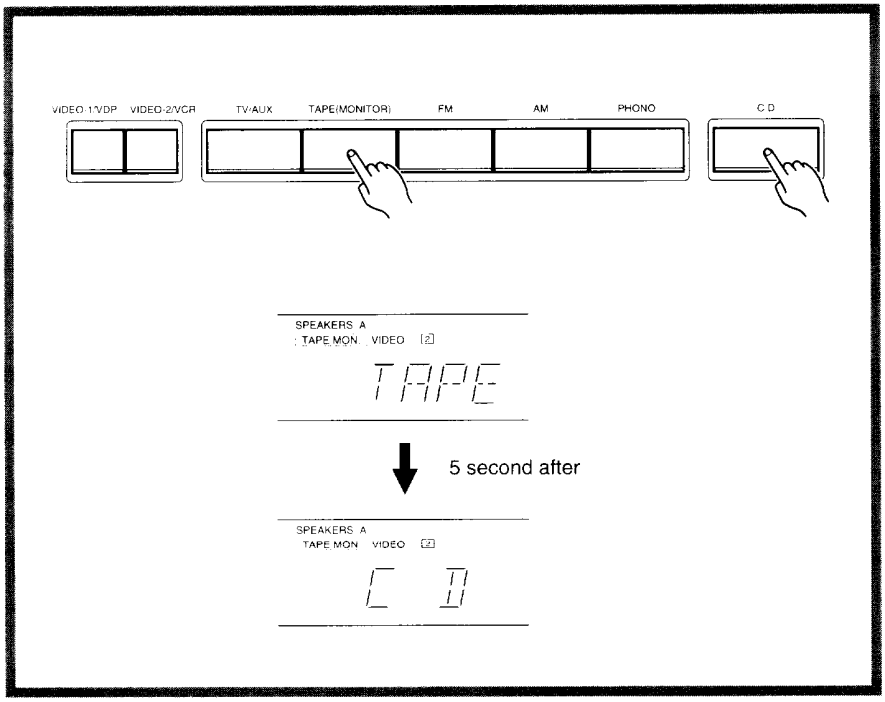
During video tape editing, you can add the desired sound on the recording VCR from various audio program sources.

Perform steps 1. through 3. above, then complete the steps below.

4. **Select the audio program source (TV/AUX, TAPE, FM, AM, PHONO, CD).**
5. **Begin playback of the video connected to the VIDEO-1 and also start the sound source, then start recording on the VIDEO-2/VCR.**

Refer to the video disc player, video camcorder or VCR instruction manuals for additional information.

Using TAPE (MONITOR) Button



Using a graphic equalizer

Connect the graphic equalizer to the TAPE jacks on the rear panel.

If a tape deck is used, connect it to the tape jacks on the graphic equalizer.

While pressing the button for the source that you wish to equalize and listen to, press the TAPE (MONITOR) button.

The TAPE MON. indicator lights up.

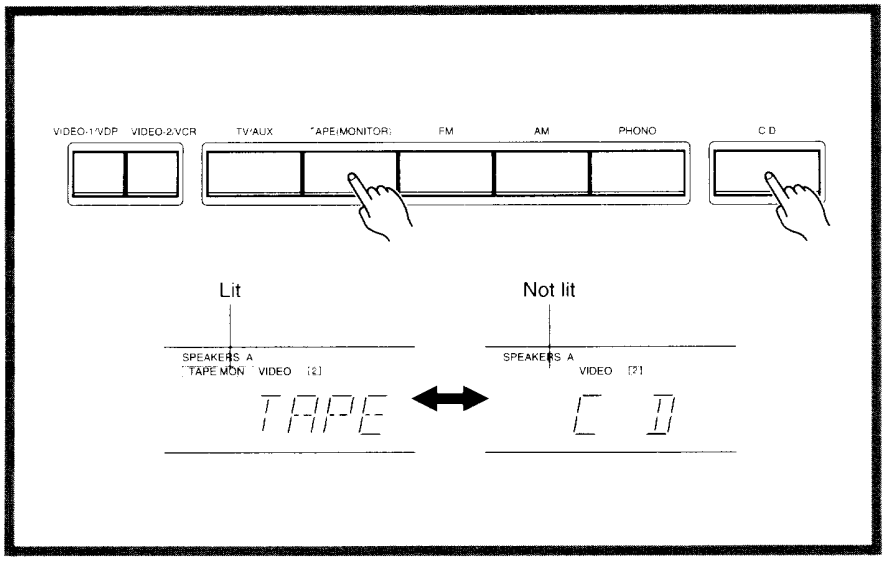
Follow the graphic equalizer operating instructions.

To record an equalized signal, use the tape deck connected to the equalizer for recording.

To turn the TAPE MON. indicator off, press the TAPE (MONITOR) button while pressing the button for the source.

CAUTION:

- Do not use a Surround mode together with the equalizer. This will result in distortion and possible damage to Surround decoder circuitry.



To monitor during recording

If a 3-head tape deck is connected to this unit, the recording can be monitored.

If the TAPE MON. indicator is not lit, the sound from the source (the sound that has not yet been recorded) is heard.

If the TAPE MON. indicator is lit, the sound that has just been recorded can be heard.

To turn the TAPE MON. indicator on or off, press the TAPE (MONITOR) button while simultaneously pressing the input selector button for the desired source.

Troubleshooting guide

If a problem occurs while you are using the remote control, first operate the unit using the front panel controls to confirm that it is not due to a malfunction (or worn out batteries) of the remote control.

Trouble	Cause	Remedy
No power.	• Power cord is disconnected. • There is external noise in the computer circuits of this unit. • AC fuse blown.	• Connect power cord. • Turn the power button off and then on again or remove the AC plug from the outlet and then plug it again. • Contact your Onkyo Service Center.
Power on but no sound.	• The TAPE MON. indicator is lit. • MUTING button is on. • Bad connections. • Amplifier protection circuitry has been activated.	• While pressing the input selector button for the source that you wish to listen to, press the TAPE (MONITOR) button. The TAPE MON. indicator goes off. • Switch to off by the remote control. • Check connections, speaker cables, etc. • Contact your Onkyo Service Center.
No sound from the center speaker, or very minimal sound.	• Speaker cable connections are not corrected. • SURROUND MODE button is set to BY-PASS. • CENTER LEVEL is set to minimum. • CENTER MODE button is set to PHANTOM.	• Check the connection between the amplifier and the speaker. • Set the SURROUND MODE button to DOLBY PRO LOGIC or HALL. • Set the CENTER LEVEL to the appropriate volume. • Set CENTER MODE button to NORMAL or WIDEBAND.
Hum, low-frequency noise.	• Poor or no input ground. • Poor or no phono motor ground. • The placement of the audio connection cables on the rear panel is incorrect.	• Check outer conductor of input plugs. • Check for proper ground connection. • Adjust the placement of the cable to reduce hum.
Howling when the volume is turned up.	• Turntable and speakers are too close together.	• Move them farther apart.
Rough or scratchy sound. High range is not clear.	• Stylus of turntable pick-up is worn. • Turntable stylus tip is dirty. • Treble control too high.	• Replace. • Clean. • Turn treble control down.
AM stations cannot be received.	• AM loop antenna is not attached.	• Connect the included AM loop antenna to the AM antenna terminals.
Buzzing noise on AM (particularly conspicuous at night or with weak stations).	• Noise from electrical apparatus such as fluorescent lamp.	• Move the AM loop antenna to different position. • Set up an outdoor AM antenna.
High-pitched noise or buzzing noise on AM.	• Noise from TV set.	• Place the AM loop antenna as far as possible from the TV. • Move unit away from TV set.
Crackling noise on AM, FM.	• Noise caused by turning fluorescent lamp on and off. • Noise from automobile ignition.	• Move antenna as far as possible from the fluorescent lamp. • Install an FM outdoor antenna as far as possible from the road. • Change the position or direction of the outdoor antenna.
TUNED and STEREO indicators light but sound is distorted and stereo separation is bad.	• Station is too strong. • Multiple reflection of the radio waves because of tall buildings or mountains.	• Change to T-shaped antenna. • Use antenna which has better directivity and select a point where the distortion is least.
TUNED and STEREO indicators flicker and hiss is heard on FM.	• Station is too weak. • Stereo FM broadcasts cover only about half the distance of an ordinary broadcast.	• Install an outdoor FM antenna. • Change the position or direction of the outdoor antenna.
No station is recalled when the PRESET SCAN button is pressed.	• The power cord has been unplugged for a long time.	• The memory contents are lost. Store all stations again.
Front panel controls function but remote control does not.	• No batteries in remote control. • Batteries have worn out.	• Insert batteries. • Replace batteries

• Also refer to the respective instruction manuals of the video disc player, video cassette recorder, TV monitor, etc., being used.

Specifications

AMPLIFIER SECTION

Power Output

USA & Canadian models: Stereo Mode

60 watts per channel, min. RMS into 8 ohms, both channels driven from 20 Hz to 20 kHz with no more than 0.08% THD.

Surround Mode

Font L/R Channels

2 × 50 W (1 kHz, 0.08%, 8 ohms)

Center Channel

50 W (1 kHz, 0.15%, 8 ohms)

Rear Channels (Rear channel only driven)

15 W + 15 W (1 kHz, 0.3%, 8 ohms)

European models: Stereo mode

2 × 60 watts at 6 ohms (DIN)

Surround mode

Front L/R and Center Channels

3 × 50 watts at 6 ohms (DIN)

Rear Channels (Rear channel only driven)

15 watts + 15 watts at 6 ohms (DIN)

Asian models: Stereo mode

2 × 80 watts at 6 ohms, 1 kHz (EIAJ)

Surround mode

Front L/R and Center Channels

3 × 65 watts at 6 ohms, 1 kHz (EIAJ)

Rear Channels (Rear Channel only driven)

20 watts + 20 watts at 6 ohms, 1 kHz (EIAJ)

Total Harmonic Distortion: 0.08% at rated power (Front)

IM Distortion: 0.08% at rated power (Front)

Damping Factor: 60 at 8 ohms (Front)

Input Sensitivity and Impedance

Phono: 2.5 mV, 50 kohms

Line (CD, Tape, TV/AUX Video-1, 2): 200 mV, 50 kohms

Video (Video-1,2): 1 Vp-p, 75 ohms

Output Level and Impedance: Rec Out (Tape): 200 mV, 2. 2 kohms

Out (Video-2): 200 mV, 2.2 kohms

Pre Out (Subwoofer): 1 V, 2.2 kohms

Video (Video-2, Monitor): 1 Vp-p, 75 ohms

Phono Overload: 120 mV RMS, at 1 kHz, 0.5% T.H.D.

Frequency Response: 20 Hz to 30 kHz, ±1 dB

RIAA Deviation: 20 Hz to 20 kHz, ±0.8 dB

Tone Control

Bass: ±10 dB at 100 Hz

Treble: ±10 dB at 10 kHz

Signal-to-Noise Ratio

Phono: 80 dB (IHF A, 5 mV input)

CD/Tape: 100 dB (IHF A)

Muting: -50 dB

VIDEO SECTION

Signal sensitivity and impedance: 1 Vp-p, 75 ohms (VDP/VCR input, output)

TUNER SECTION

FM

Tuning Range:

U.S.A. & Canadian models: 87.5 — 108.0 MHz (100 kHz steps)

Other areas: 87.50 — 108.00 MHz (50 kHz steps)

Usable Sensitivity

Mono: 11.2 dBf, 1.0 µV (75 ohms IHF)

Stereo: 17.2 dBf, 2.0 µV (75 ohms IHF)

50dB Quieting Sensitivity

Mono: 18.2 dBf, 2.2 µV (75 ohms)

Stereo: 38.2 dBf, 22 µV (75 ohms)

Capture Ratio: 1.5 dB

Image Rejection Ratio

U.S.A. & Canadian models: 40 dB

Other area models: 85 dB

IF Rejection Ratio: 90 dB

Signal-to-Noise Ratio

Mono: 73 dB (IHF)

Stereo: 67 dB (IHF)

Alternate Channel Attenuation

Mono: 55 dB (IHF)

Selectivity: 50 dB (DIN, ±300 kHz, 40 kHz Devi.)

AM Suppression Ratio: 50 dB

Total Harmonic Distortion

Mono: 0.15%

Stereo: 0.25%

Frequency Response: 30 Hz — 15 kHz, ±1.5 dB

Stereo Separation: 45 dB at 1 kHz

30 dB at 100 Hz — 10 kHz

AM

Tuning Range

U.S.A. & Canadian models: 530—1,710 kHz (10 kHz steps)

European models: 522—1,611 kHz (9 kHz steps)

Worldwide models: 531—1,602 kHz (9 kHz steps), 530—1,710 kHz (10 kHz steps)

Usable Sensitivity: 30 µV

Image Rejection Ratio: 40 dB

IF Rejection Ratio: 40 dB

Signal-to-Noise Ratio: 40 dB

Total Harmonic Distortion: 0.7%

GENERAL

Power Supply

U.S.A. & Canadian models: AC 120 V, 60 Hz

European & Australian models: AC 230 V, 50 Hz

Woldwide models: AC 230-220 V and 120 V switchable, 50/60 Hz

Power Consumption

U.S.A. & Canadian models: 2.7 A

Other area models: 220 W

Dimensions (W × H × D): 435 × 150 × 322 mm

17-1/8″ × 5-7/8″ × 12-11/16″

Weight: 8.2 kg, 18. 1lbs.

REMOTE CONTROL RC-328S

Transmitter: Infrared

Signal range: Approx. 5 meters, 16 ft.

Power supply: Two "AA" batteries (1.5 V × 2)

Specifications and features are subject to change without notice.

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